Fastener Tightening Specifications

Application	Specification	
	Metric	English
Door Check Link to Door Retaining Nuts	6 N·m	53 lb in
Door Check Link to Pillar Retaining Bolt	25 N·m	18 lb ft
Door Hinge Keeper Bolt	3 N·m	27 lb in
Door Hinge to Door Retaining Bolts	28 N·m	21 lb ft
Door Hinge to Pillar Retaining Bolts	28 N·m	21 lb ft
Fuel Tank Filler Door to Rear Quarter Panel Retaining Screws	2 N·m	18 lb in
Front Fender to Body Side Retaining Bolts	9 N·m	80 lb in
Front Fender to Door Pillar Retaining Bolts	9 N·m	80 lb in
Front Fender to Front End Module Retaining Bolt	9 N·m	80 lb in
Front Fender to Inner Wheelhouse Retaining Bolts	9 N·m	80 lb in
Hood Assist Rod Upper Ball Stud	18 N·m	13 lb ft
Hood Hinge to Dash And Cowl Panel Brace Retaining Bolt	20 N·m	15 lb ft
Hood Latch to Front End Module Retaining Bolts	9 N·m	80 lb in
Hood Hinge to Hood Retaining Bolts	20 N·m	15 lb ft

© 2010 General Motors Corporation. All rights reserved.

Front End Panel Module Carrier Assembly Replacement

Removal Procedure

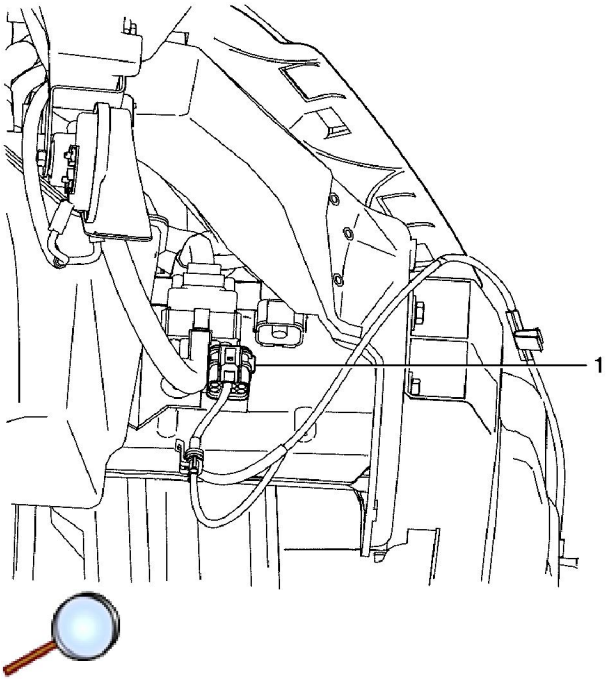
Warning: Refer to Safety Glasses Warning in the Preface section.

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Install a suitable hood brace to the vehicle.
2. Apply tape to corners of the panels and adjacent surfaces to help prevent paint damage.
3. Remove the radiator air baffle. Refer to Radiator Air Upper Baffle and Deflector Replacement.

Danger: To avoid any vehicle damage, serious personal injury or death when major components are removed from the vehicle and the vehicle is supported by a hoist, support the vehicle with jack stands at the opposite end from which the components are being removed and strap the vehicle to the hoist.

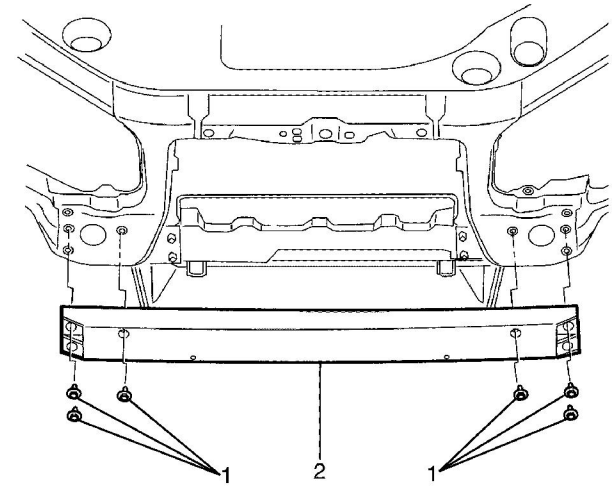
4. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
5. Remove the front wheels. Refer to Tire and Wheel Removal and Installation.
6. Remove the front wheelhouse liners. Refer to Front Wheelhouse Liner Replacement.
7. Remove the front bumper fascia. Refer to Front Bumper Fascia Replacement.
8. Remove the front air deflector. Refer to Front Air Deflector Replacement.



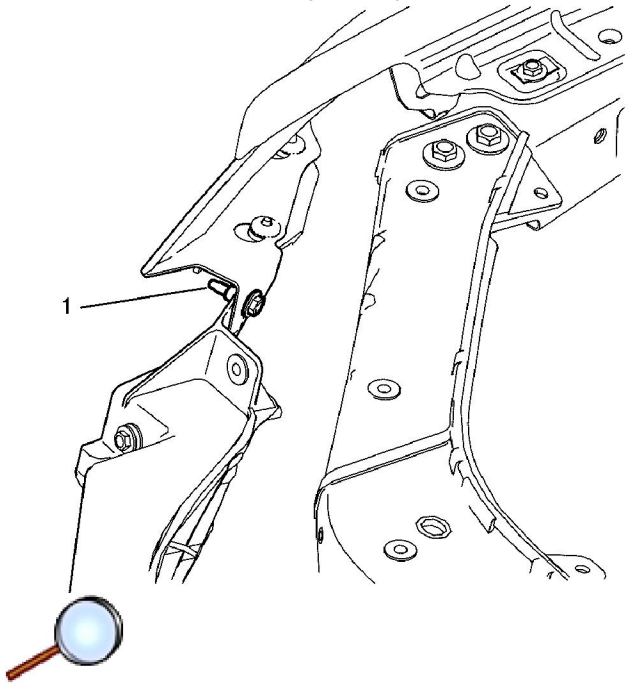
9. Disconnect the main wiring harness (1) to the front end module.
10. Remove the front bumper fascia bracket. Refer to Front Bumper Impact Bar Bracket Replacement.
11. Remove the headlights. Refer to Headlamp Replacement.
12. Remove the hood latch. Refer to Hood Primary and Secondary Latch Replacement.
13. Remove the front energy absorber. Refer to Front Bumper Fascia Energy Absorber Replacement.

© 2010 General Motors Corporation. All rights reserved.

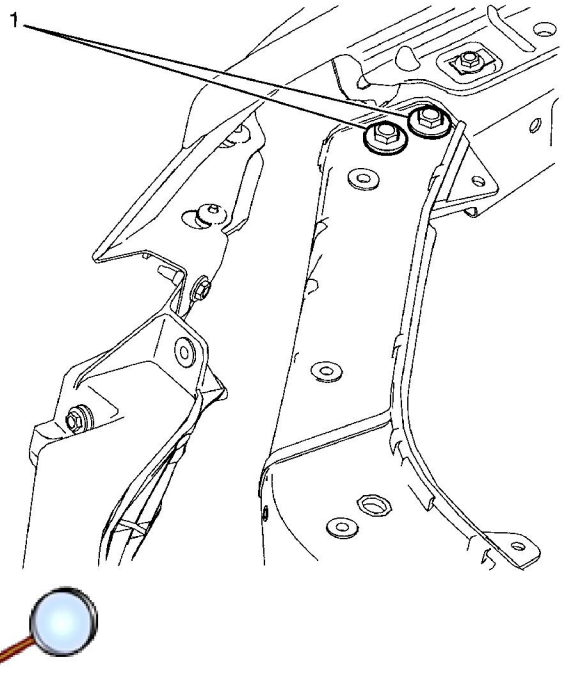
14. Disconnect the washer jet pump to washer jet lines. Refer to Washer Pump Replacement.
15. Remove the fog lamp wiring loom. Refer to Front Fog Lamp Replacement.



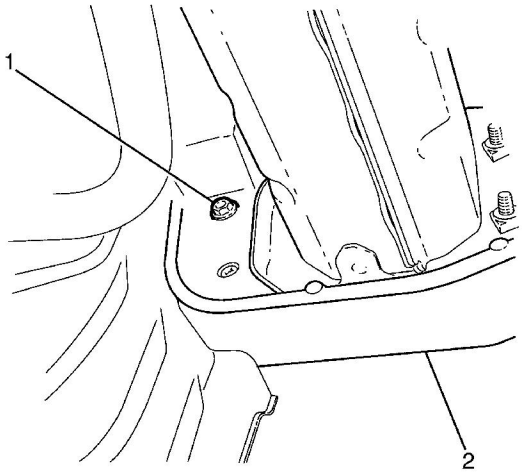
16. Remove the front bumper impact bar to front end module retaining bolts (1).



17. Remove the front fender to front end module retaining bolt (1).



18. Remove the front end module to inner wheelhouse retaining bolts (1).
19. With the aid of an assistant, remove the front end module from the vehicle.

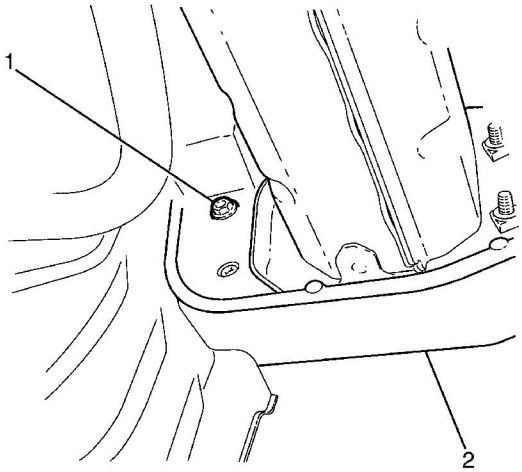


20. Remove the front end module to front bumper impact bar retaining bolts (1). Repeat for opposite side.
21. Remove the front bumper impact bar from the front end module.
22. Remove the windshield washer bottle. Refer to Windshield Washer Solvent Container Replacement.
23. Remove the radiator air intake baffle. Refer to Radiator Air Lower Baffle and Deflector Replacement.
24. Remove the horns. Refer to Horn Replacement.
25. Remove the wiring loom from the front end module.

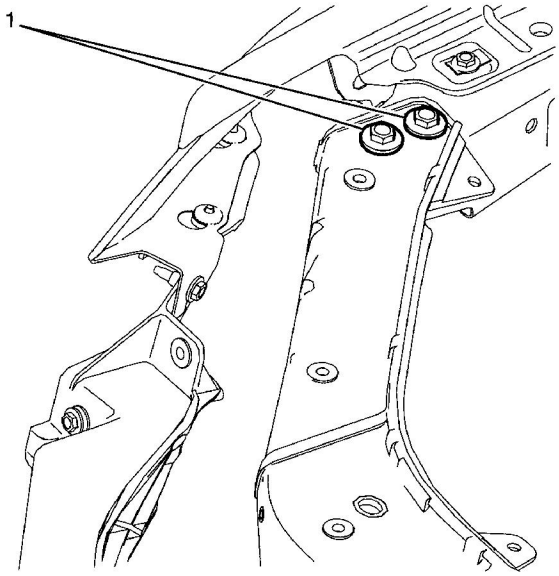
Installation Procedure

1. Install the wiring loom to the front end module.
2. Install the horns. Refer to Horn Replacement.
3. Install the radiator air intake baffle. Refer to Radiator Air Lower Baffle and Deflector Replacement.
4. Install the windshield washer bottle. Refer to Windshield Washer Solvent Container Replacement.
5. Install the front bumper impact bar to the front end module.

Caution: Refer to Fastener Caution in the Preface section.

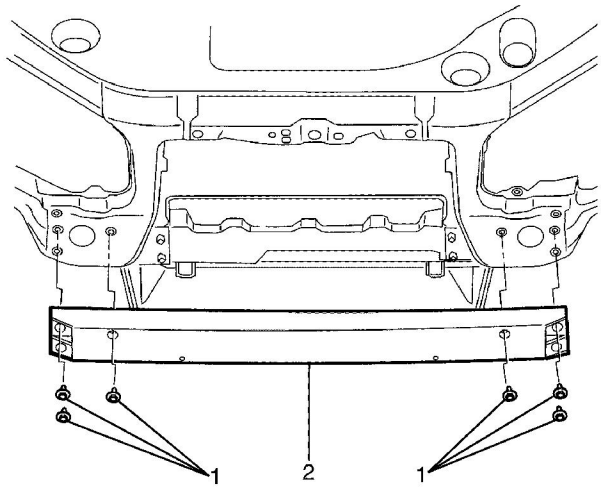


6. Install the front bumper impact bar to front end module retaining bolts (1) and tighten to **4 N·m (35 lb in)**. Repeat for opposite side.
7. With the aid of an assistant, install the front end module to the vehicle.



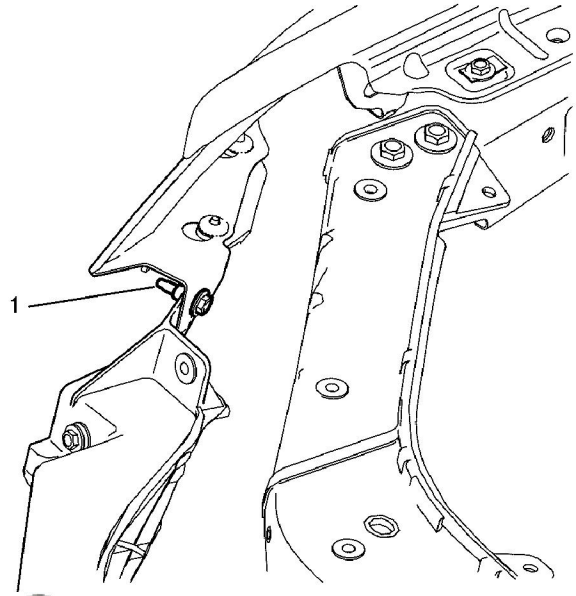
Note: Do not fully tighten at this stage.

8. Install the front end module to inner wheelhouse retaining bolts (1).



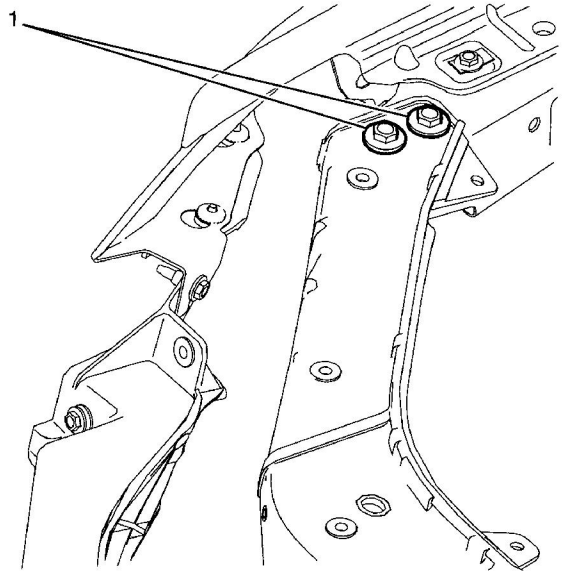
Note: Do not fully tighten at this stage.

9. Install the front bumper impact bar to front end module retaining bolts (1).

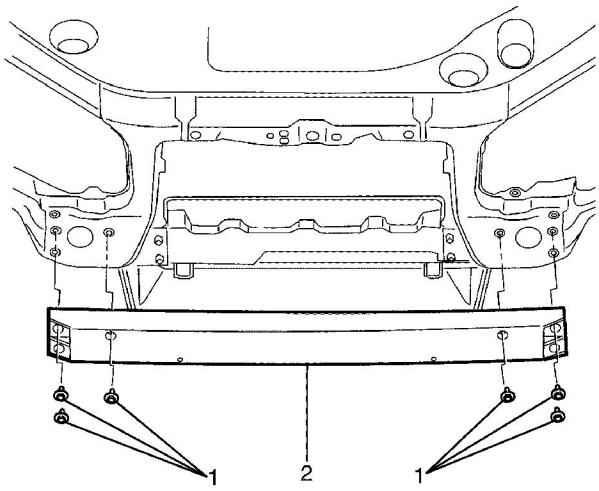


Note: Do not fully tighten at this stage.

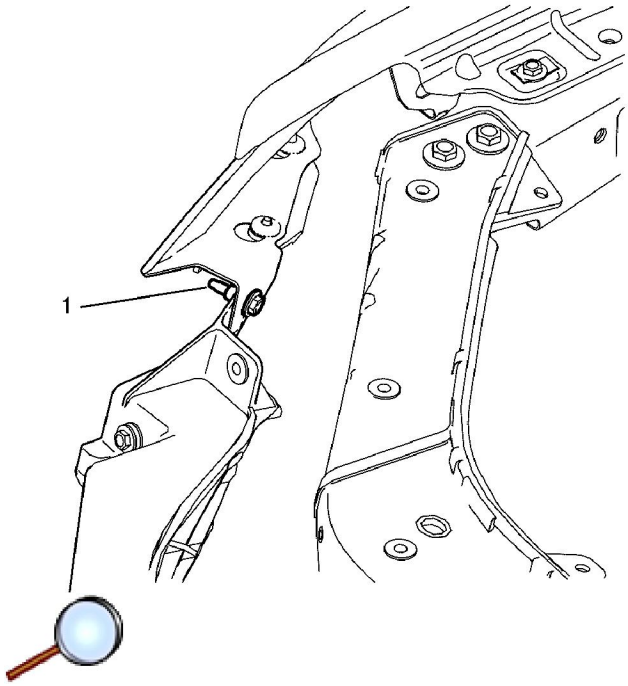
10. Install the front fender to front end module retaining bolt (1). Repeat for opposite side.



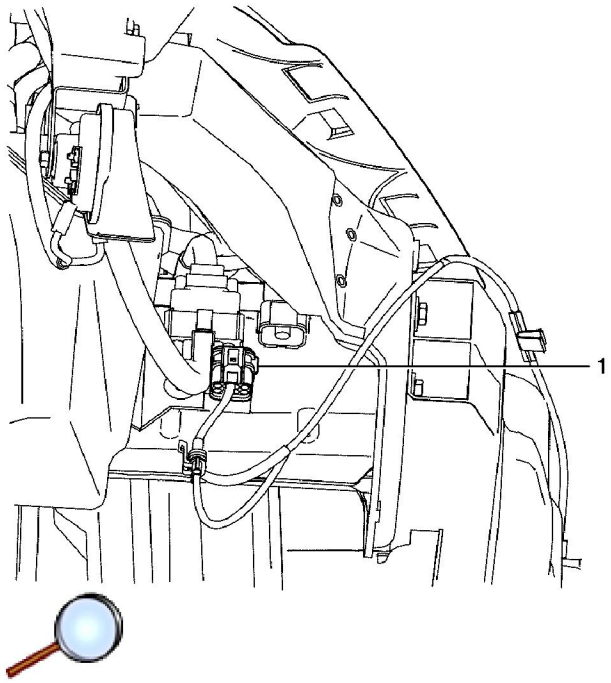
11. Tighten the front end module to inner wheelhouse retaining bolts (1) and tighten to **9 N·m (80 lb in)**.



12. Tighten the front bumper impact bar to front end module retaining bolts (1) and tighten to **22 N·m (16 lb ft)**.



13. Tighten the front fender to front end module retaining bolt (1) and tighten to **9 N·m (80 lb in)**. Repeat for opposite side.
14. Install the washer jet pump to washer jet lines. Refer to Washer Pump Replacement.
15. Install the front energy absorber. Refer to Front Bumper Fascia Energy Absorber Replacement.
16. Install the fog lamp wiring loom. Refer to Front Fog Lamp Replacement.
17. Install the hood latch. Refer to Hood Primary and Secondary Latch Replacement.
18. Install the headlight. Refer to Headlamp Replacement.
19. Install the front bumper fascia bracket. Refer to Front Bumper Impact Bar Bracket Replacement.
20. Install the front air deflector. Refer to Front Air Deflector Replacement.
21. Install the front bumper fascia. Refer to Front Bumper Fascia Replacement.



22. Connect the main wiring harness (1) to the front end module.
23. Install the front wheelhouse liners. Refer to Front Wheelhouse Liner Replacement.

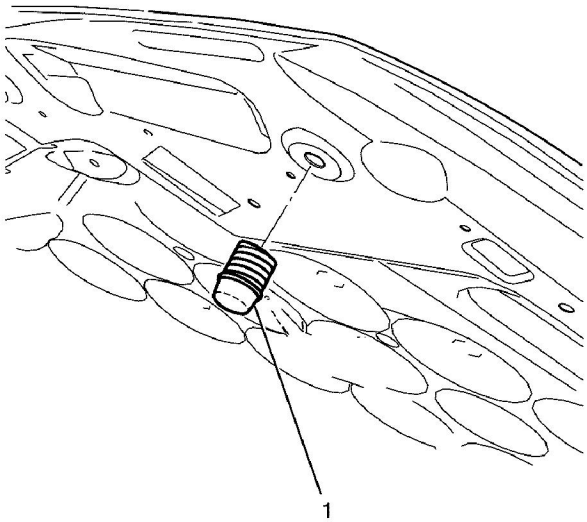
24. Install the front wheels. Refer to Tire and Wheel Removal and Installation.
25. Lower the vehicle.
26. Install the radiator air baffle. Refer to Radiator Air Upper Baffle and Deflector Replacement.
27. Remove the suitable hood brace from the vehicle.
28. Remove the tape from the vehicle.

Hood Bumper Replacement

Removal Procedure

Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

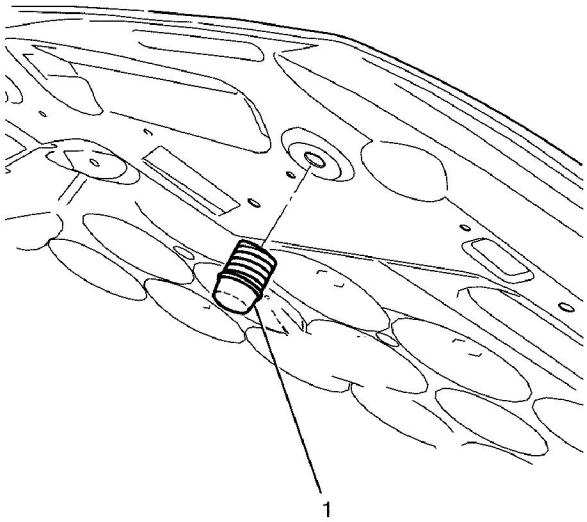
1. Install a suitable hood brace to the vehicle.



2. Remove the hood bumpers (1) from the hood by turning counter clockwise.

Installation Procedure

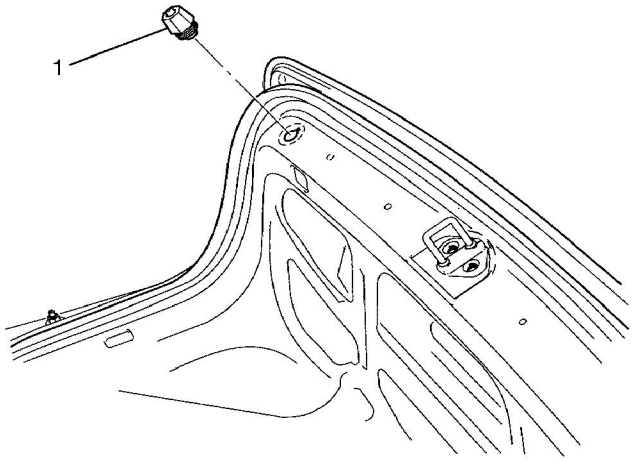
© 2010 General Motors Corporation. All rights reserved.



1. Position the hood bumpers (1) to the opening in the hood.
2. Turn the hood bumpers clockwise until they bottom out in the hood.
3. Turn the hood bumpers anti clockwise until the hood is flush with the fenders.
4. Remove the suitable hood brace from the vehicle.

Rear Compartment Lid Overslam Bumper Replacement

Removal Procedure

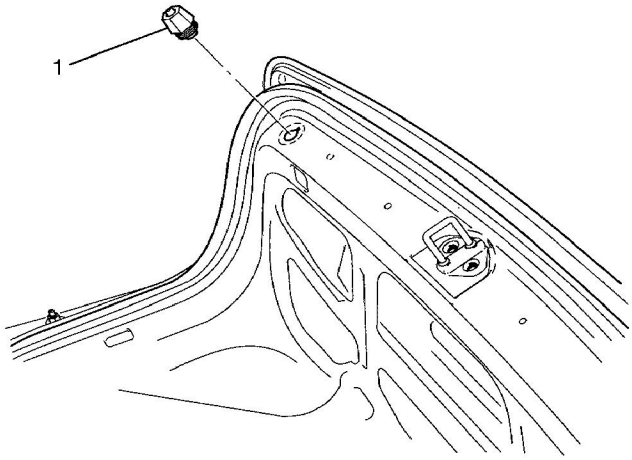


Important: Turn the overslam bumper (1) counter-clockwise to remove.

1. Remove the overslam bumper (1) from the rear compartment lid.
2. Remove the overslam bumper (1) from the vehicle.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



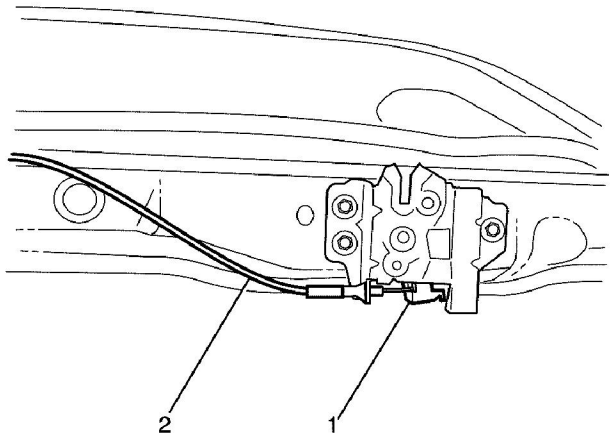
Important: Turn the overslam bumper (1) clockwise to install.

1. Install the overslam bumper (1) to the rear compartment lid.
2. Turn the overslam bumper as required for flushness. Refer to Rear Compartment Lid Adjustment .

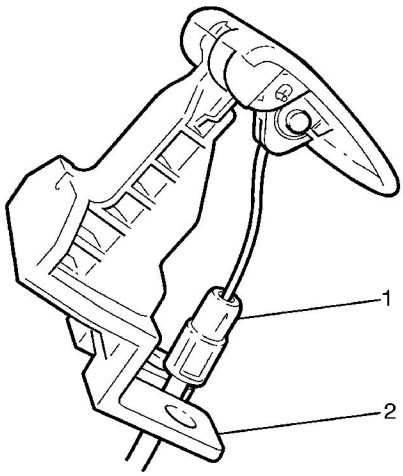
Hood Primary Latch Release Cable Replacement

Removal Procedure

1. Remove the hood latch. Refer to Hood Primary and Secondary Latch Replacement.

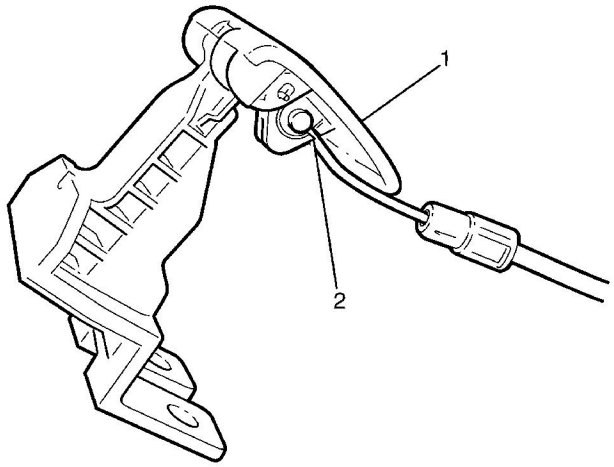


2. Attach a piece of string around the hood release cable (2). This will ease the installation of the hood release cable through the engine compartment.
3. Remove the right side hinge pillar trim panel. Refer to Body Hinge Pillar Trim Panel Replacement.
4. Remove the right knee bolster. Refer to Knee Bolster Replacement.

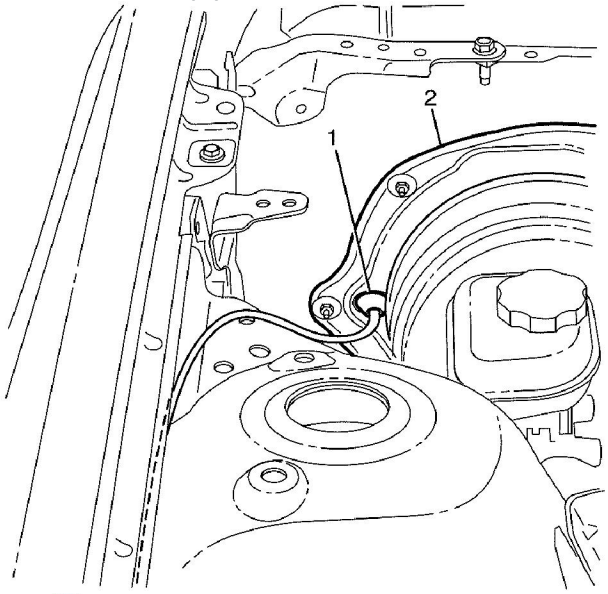


© 2010 General Motors Corporation. All rights reserved.

5. Disconnect the hood release cable (1) from the hood release handle (2).



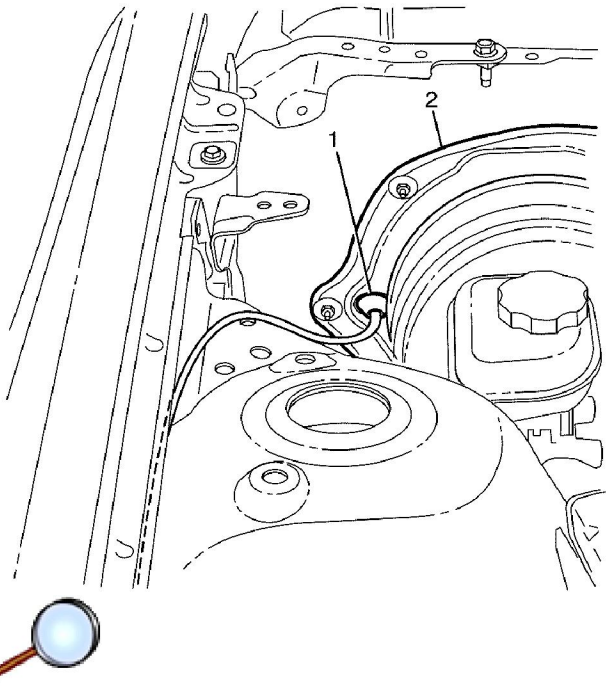
6. Rotate the hood release cable and detach the hood release cable barrel (2) from the hood release handle (1).



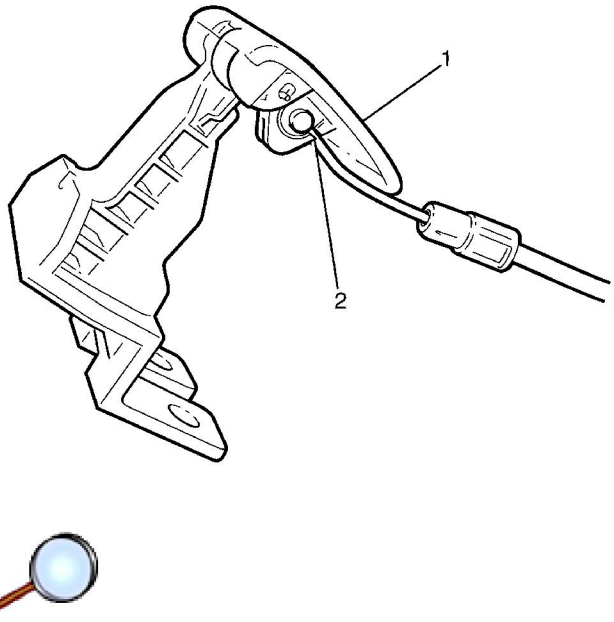
7. Remove the hood release cable grommet (1) from the mod plate (2).
8. Remove the hood release cable from the vehicle.

Installation Procedure

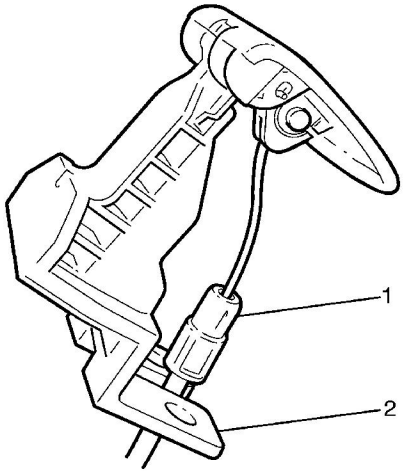
1. Transfer the string to the end of the new hood release cable.
2. Route the string and the hood release cable into the passenger compartment.
3. Remove the string from the hood release cable.



4. Seat the hood release cable grommet (1) into the mod plate (2).



5. Attach the hood release cable barrel (2) to the hood release handle (1).

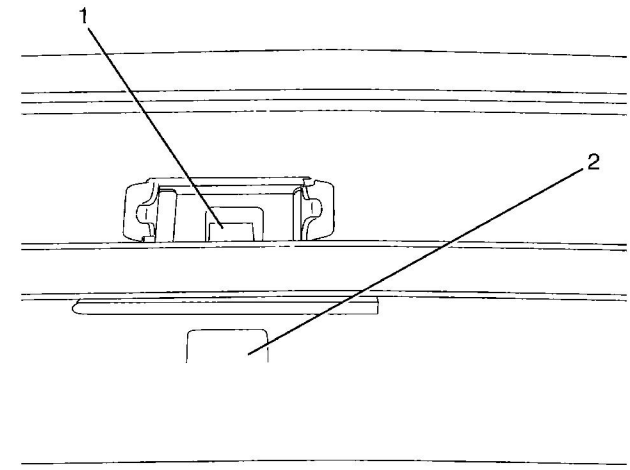


6. Rotate and connect the hood release cable (1) to the hood release handle assembly (2).
7. Install the right knee bolster. Refer to Knee Bolster Replacement.
8. Install the right side hinge pillar trim panel. Refer to Body Hinge Pillar Trim Panel Replacement.
9. Install the hood latch. Refer to Hood Primary and Secondary Latch Replacement.

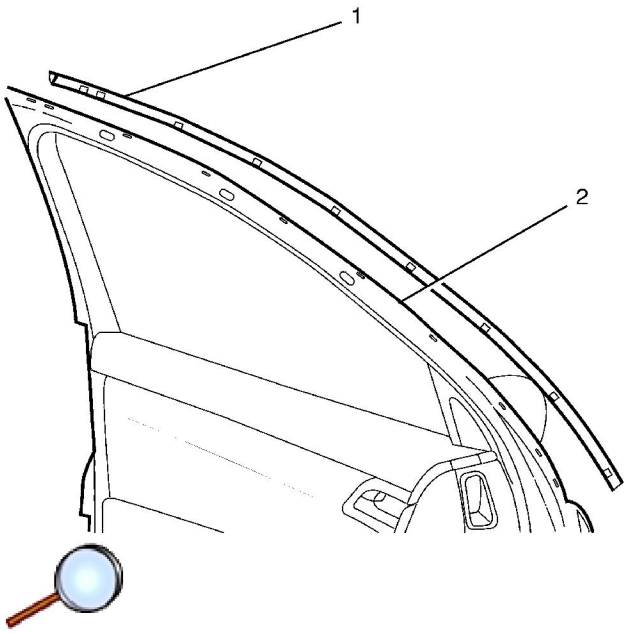
Front and Rear Side Door Window Garnish Molding Replacement (Front)

Removal Procedure

1. Remove the front door upper auxiliary weatherstrip. Refer to Front Side Door Upper Auxiliary Weatherstrip Replacement.



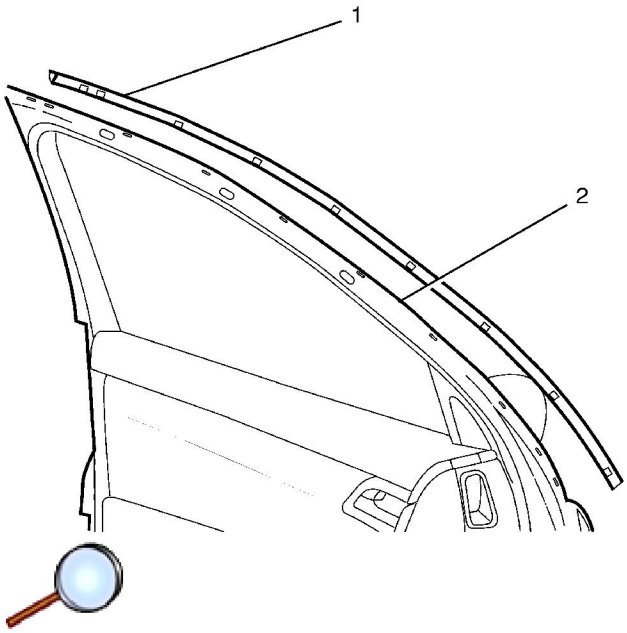
2. Detach the door frame garnish molding locking tab (1) from the door frame (2) using a suitable flat bladed tool.



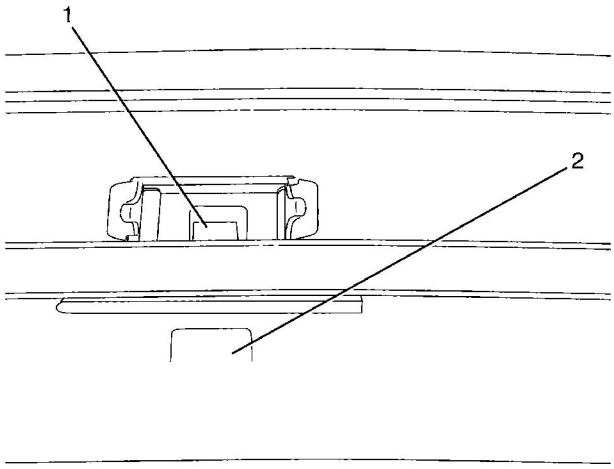
© 2010 General Motors Corporation. All rights reserved.

3. Remove the door frame garnish molding (1) from the door (2).

Installation Procedure



1. Position the door frame garnish molding (1) to the door (2).



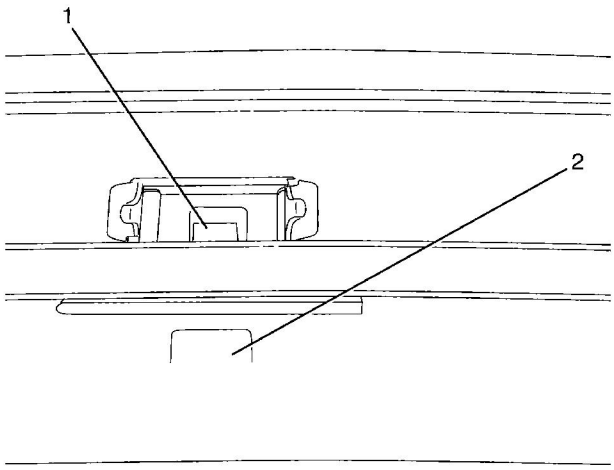
Note: Push the door frame garnish molding until the locking tab (1) locates in the door frame (2).

2. Attach the door frame garnish molding locking tab (1) from the door frame (2).
3. Install the front door upper auxiliary weatherstrip. Refer to Front Side Door Upper Auxiliary Weatherstrip Replacement.

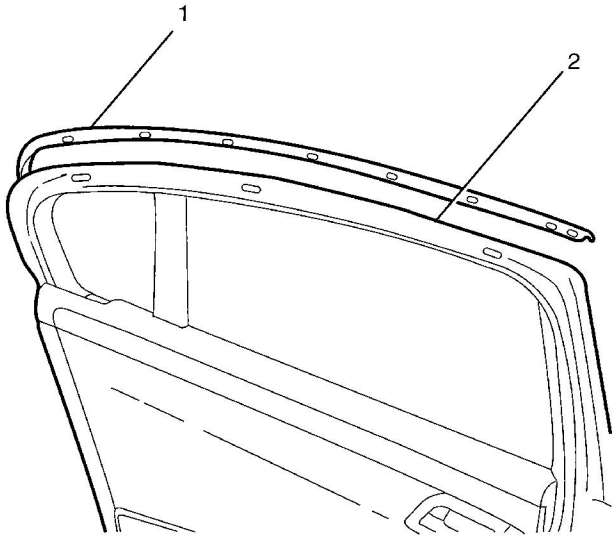
Front and Rear Side Door Window Garnish Molding Replacement (Rear)

Removal Procedure

1. Remove the rear door bottom auxiliary weatherstrip. Refer to Rear Side Door Bottom Auxiliary Sealing Strip Replacement.



2. Detach the door frame garnish molding locking tab (1) from the door frame (2) using a suitable flat bladed tool.

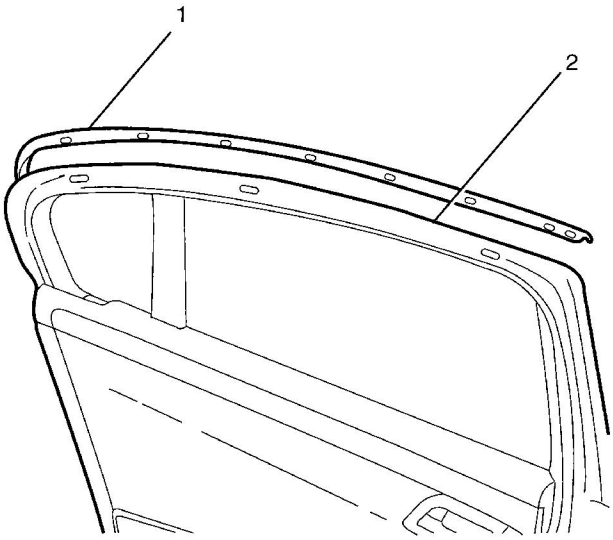


© 2010 General Motors Corporation. All rights reserved.

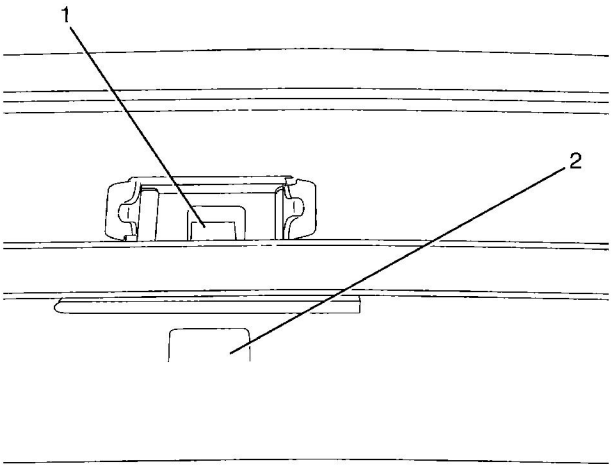
Note: Detach the clips on the door frame garnish molding (1) with a suitable flat bladed tool.

3. Remove the door frame garnish molding (1) from the door (2).

Installation Procedure



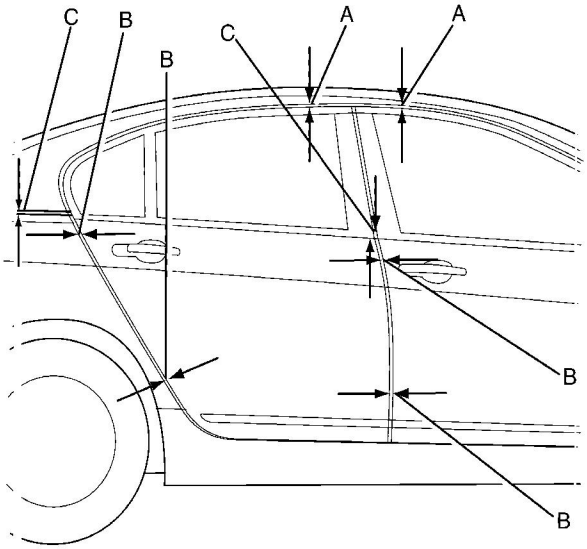
1. Install the door frame garnish molding (1) to the door (2).



Note: Push the door frame garnish molding until the locking tab (1) locates in the door frame (2).

2. Attach the door frame garnish molding locking tab (1) from the door frame (2).
3. Install the rear door bottom auxiliary weatherstrip. Refer to Rear Side Door Bottom Auxiliary Sealing Strip Replacement.

Door Adjustment



1. Loosen the door hinge to pillar retaining bolts. This will allow adjustment of the door at the hinge pillar in the following directions:
   - Up or down (a), 6.5 mm equal gap.
   - Fore or aft (b), 3.5 mm equal gap.
   - Up or down (c), 5 mm upwards.
2. Reposition the door as needed.

   Caution: Refer to Fastener Caution in the Preface section.

3. Position the door fore or aft at the hinge pillar attachment. Perform the following steps as needed:
   3.1. Loosen the bolts.
   3.2. Reposition the door and tighten the bolts to **28 N-m (21 lb ft)**
4. Verify the doors are flush to within 3.5 mm, with a flushing magnet located in the striker area below the beltline.
5. If in or out adjustment is needed, loosen the door hinge to door retaining bolts.
6. Align the front door to the front fender first, if needed.
7. Position the door in or out. Perform the following steps as needed:
   7.1. Loosen the bolts.
   7.2. Reposition the door and tighten the bolts to **28 N-m (21 lb ft)**.
8. Align the rear door to the front door and rear quarter, if needed.
9. Position the door in or out. Perform the following steps as needed:
   9.1. Loosen the bolts.
   9.2. Reposition the door and tighten the bolts to **28 N-m (21 lb ft)**.
10. Verify door header to door header at the center pillar is flush to within 3.5 mm. Adjust the

© 2010 General Motors Corporation. All rights reserved.

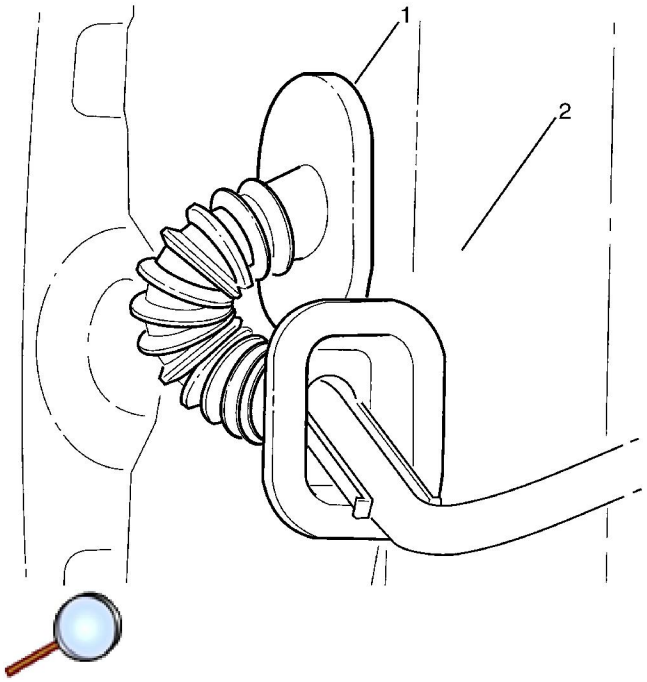
door headers if necessary.

11. Verify all door gaps are within specifications.
12. Adjust the lock striker. Refer to Door Lock Striker Adjustment.

Front Side Door Replacement

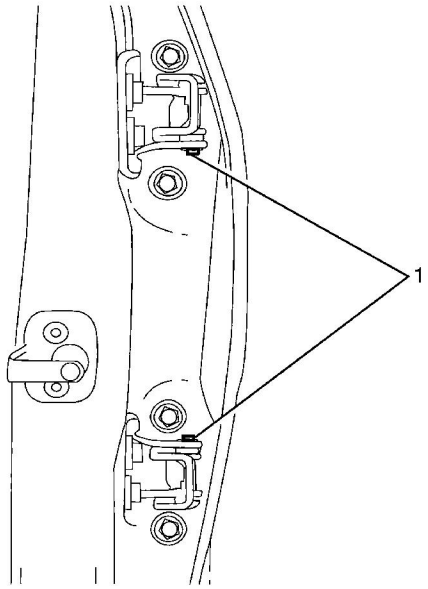
Removal Procedure

1. Remove the check link to pillar retaining bolt. Refer to Front Side Door Check Link Replacement.



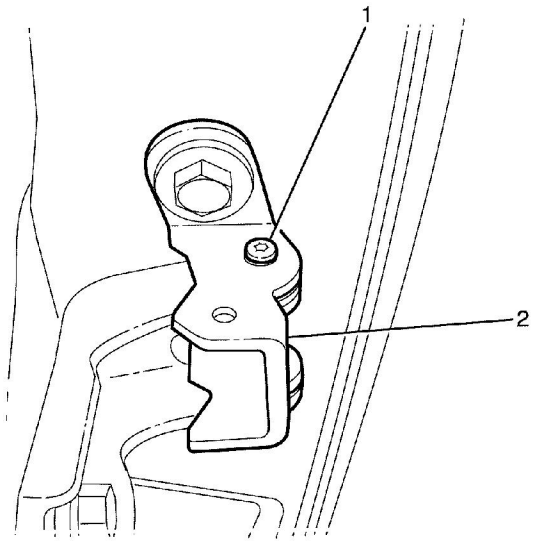
Note: Pull the rubber conduit (1) from the pillar (2) to expose the door to body wiring harness plug.

2. Remove the rubber conduit (1) from the pillar (2).
3. Disconnect the door wiring harness to body wiring harness electrical connector.



© 2010 General Motors Corporation. All rights reserved.

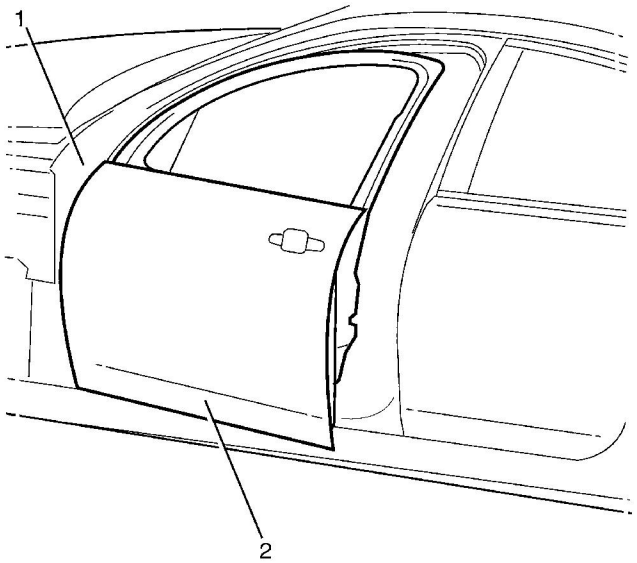
4. The keeper bolts (1) are located in the door hinges with the top door hinge keeper bolt facing downwards and the lower door hinge keeper bolt facing upwards.



Note: The keeper bolts (1) are single use parts and must be discarded after use.

5. Remove the keeper bolts (1) from the door hinges (2).

   Discard the bolts.



Note: The door (1) can only be removed when it is opened to 50 degrees.

Note: Lift the door (1) upwards and outwards to disengage it from the vehicle (2).

6. Remove the door (2) from the vehicle (1) with the aid of an assistant.

Disassembly Procedure

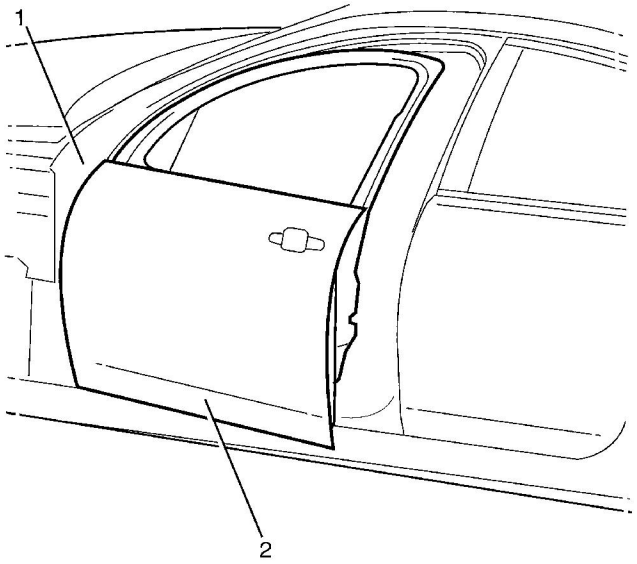
1. Remove the door trim panel. Refer to Front Side Door Trim Panel Replacement.
2. Remove the speaker. Refer to Radio Front Side Door Lower Speaker Replacement.
3. Remove the water deflector. Refer to Front Side Door Water Deflector Replacement.
4. Remove the outside rearview mirror. Refer to Power Mirror Replacement.
5. Remove the window inner belt sealing strip. Refer to Front Side Door Window Inner Sealing Strip Replacement.
6. Remove the window outer belt sealing strip. Refer to Front Side Door Window Belt Outer Sealing Strip Replacement.
7. Remove the window. Refer to Front Side Door Window Replacement.
8. Remove the front door upper auxiliary weatherstrip. Refer to Front Side Door Upper Auxiliary Weatherstrip Replacement.
9. Remove the front door garnish molding. Refer to Front and Rear Side Door Window Garnish Molding Replacement.
10. Remove the inner window sealing strip. Refer to Front Door Opening Weatherstrip Replacement.
11. Remove the door frame applique. Refer to Front Door Frame Applique Replacement.
12. Remove the window inner weatherstrip. Refer to Front Side Door Window Inner Weatherstrip Replacement.
13. Remove the window regulator. Refer to Front Side Door Window Regulator Replacement.
14. Remove the outside door handle. Refer to Front Side Door Outside Handle Replacement.
15. Remove the door latch. Refer to Front Side Door Latch Replacement.
16. Remove the door bottom auxiliary sealing strip. Refer to Front Side Door Bottom Auxiliary Sealing Strip Replacement.
17. Remove the door wiring harness. Refer to Front Side Door Wiring Harness Replacement.
18. Remove the door window channel. Refer to Front Side Door Window Front Channel and Rear Channel Replacement.
19. Remove the door check link. Refer to Front Side Door Check Link Replacement.
20. Remove all of the plastic nuts, grommets and retainers from the door.

Assembly Procedure

1. Install all the plastic nuts, grommets and retainers into the door shell that were removed during disassembly.
2. Install the door check link. Refer to Front Side Door Check Link Replacement.
3. Install the door window channel. Refer to Front Side Door Window Front Channel and Rear Channel Replacement.
4. Install the door wiring harness. Refer to Front Side Door Wiring Harness Replacement.
5. Install the door bottom auxiliary sealing strip. Refer to Front Side Door Bottom Auxiliary Sealing Strip Replacement.
6. Install the door latch. Refer to Front Side Door Latch Replacement.
7. Install the outside door handle. Refer to Front Side Door Outside Handle Replacement.
8. Install the window regulator. Refer to Front Side Door Window Regulator Replacement.
9. Install the window inner weatherstrip. Refer to Front Side Door Window Inner Weatherstrip Replacement.
10. Install the door frame applique. Refer to Front Door Frame Applique Replacement.
11. Install the window. Refer to Front Side Door Window Replacement.

12. Install the inner window sealing strip. Refer to Front Door Opening Weatherstrip Replacement.
13. Install the window outer belt seal strip.. Refer to Front Side Door Window Belt Outer Sealing Strip Replacement.
14. Install the outside rearview mirror. Refer to Power Mirror Replacement.
15. Install the window inner belt seal strip. Refer to Front Side Door Window Belt Inner Sealing Strip Replacement.
16. Install the front door garnish molding. Refer to Front and Rear Side Door Window Garnish Molding Replacement
17. Install the front door upper auxiliary weatherstrip. Refer to Front Side Door Upper Auxiliary Weatherstrip Replacement.
18. Install the water deflector. Refer to Front Side Door Water Deflector Replacement.
19. Install the speaker. Refer to Radio Front Side Door Lower Speaker Replacement.
20. Install the door trim panel. Refer to Front Side Door Trim Panel Replacement.
21. Inspect for correct door adjustment. Refer to Door Adjustment.

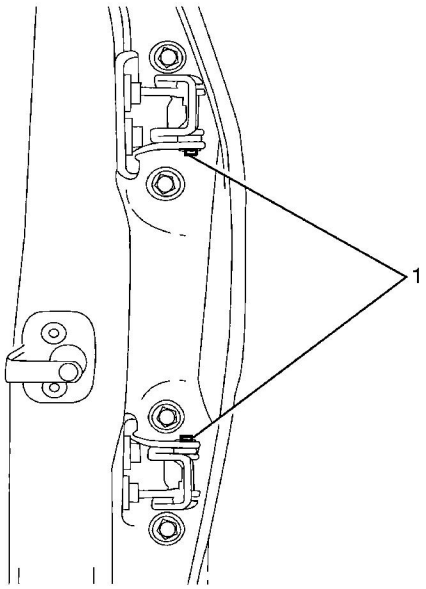
Installation Procedure



Note: The door (1) can only be installed when it is opened to 50 degrees.

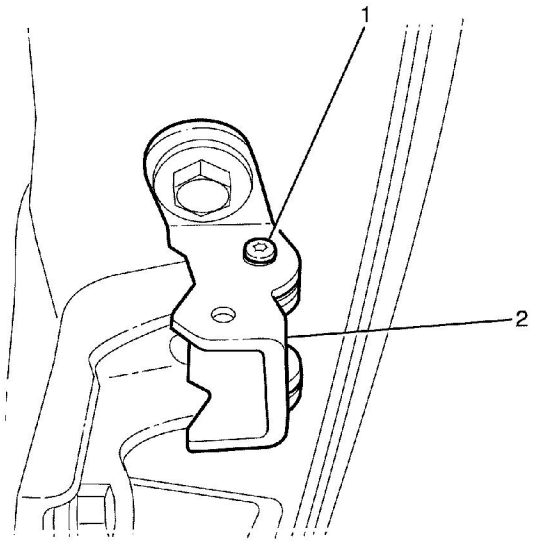
Note: Lower the door (1) downwards and inwards to engage it to the vehicle (2).

1. Install the door (2) to the vehicle (1) with the aid of an assistant.



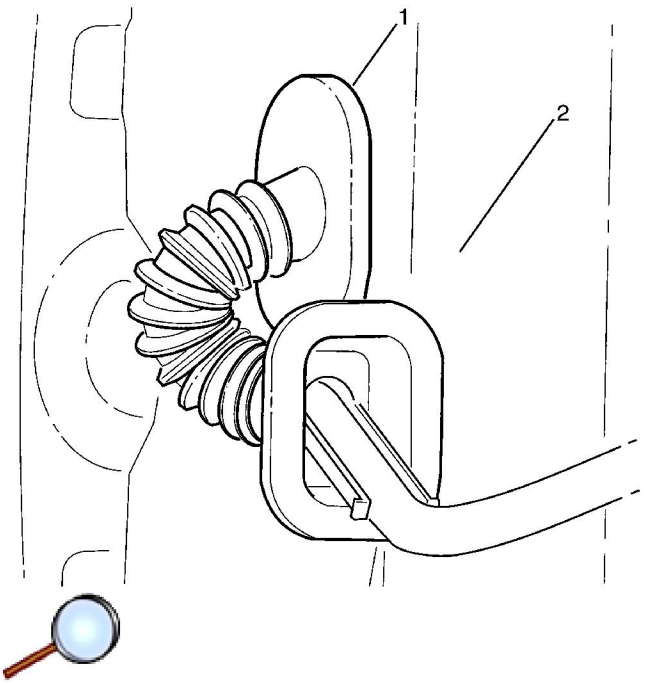
2. The keeper bolts (1) are located in the door hinges with the top door hinge keeper bolt facing downwards and the lower door hinge keeper bolt facing upwards.

Caution: Refer to Fastener Caution in the Preface section.



Note: Do Not over tighten the NEW keeper bolts as this will cause the door hinges to squeak.

3. Install the NEW keeper bolts (1) to the door hinges (2) and tighten to **3 N-m (27 lb in)**.
4. Connect the door wiring harness to body wiring harness electrical connector.

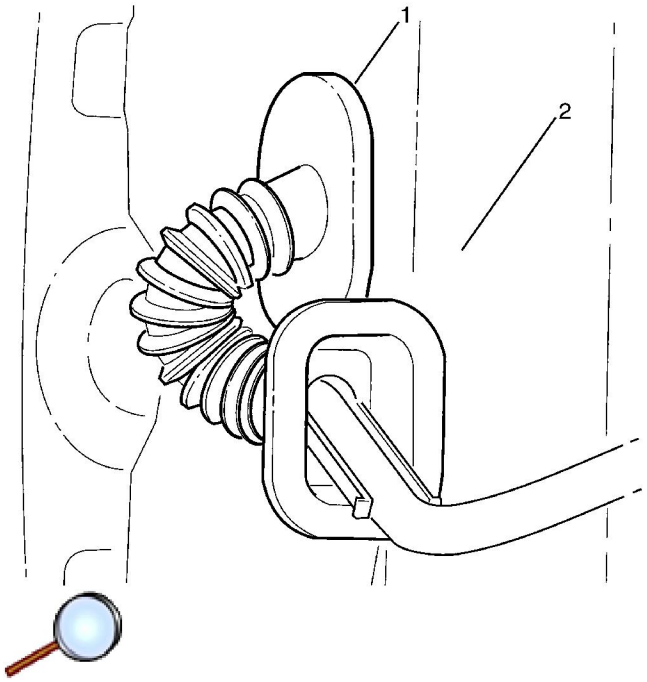


5. Install the rubber conduit (1) to the pillar (2).
6. Install the check link to pillar retaining bolt. Refer to Front Side Door Check Link Replacement.

Rear Door Replacement

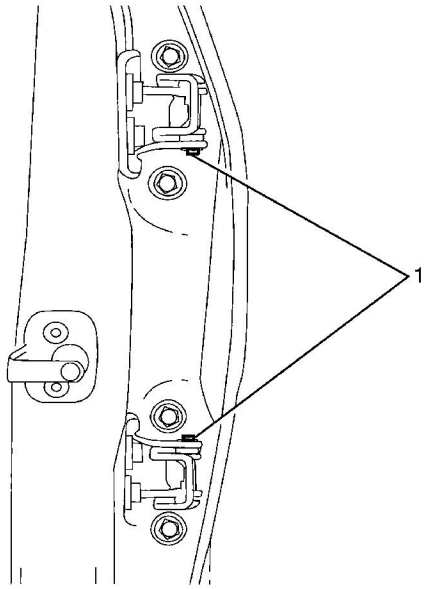
Removal Procedure

1. Remove the check link to pillar retaining bolt. Refer to Rear Side Door Check Link Replacement.



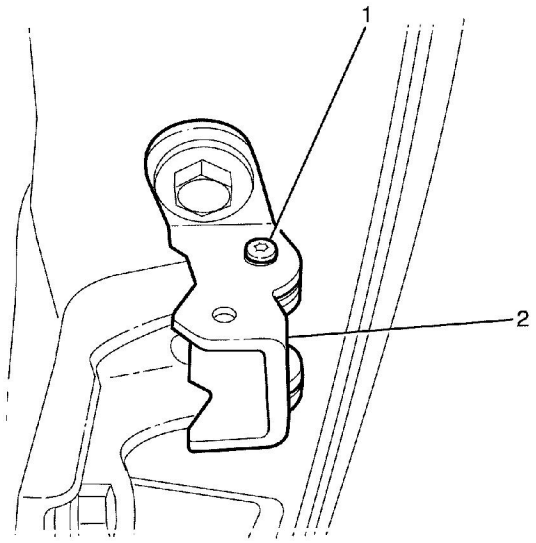
Note: Pull the rubber conduit (1) from the pillar (2) to expose the door to body wiring harness plug.

2. Remove the rubber conduit (1) from the pillar (2).
3. Disconnect the door wiring harness to body wiring harness electrical connector.



© 2010 General Motors Corporation. All rights reserved.

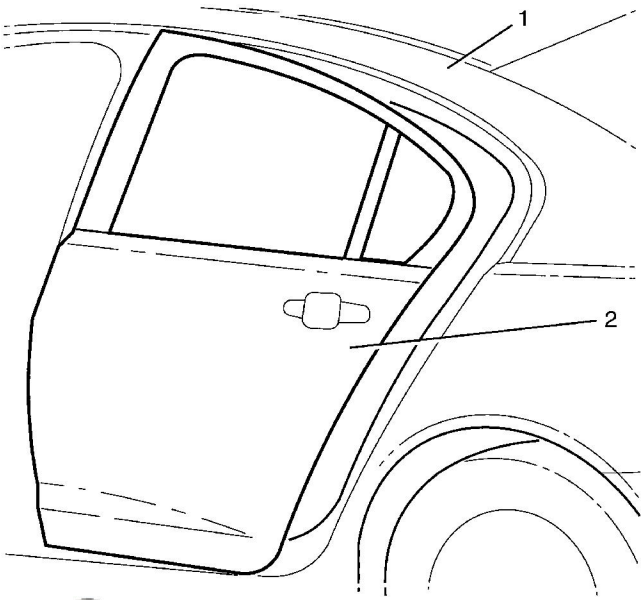
4. The keeper bolts (1) are located in the door hinges with the top door hinge keeper bolt facing downwards and the lower door hinge keeper bolt facing upwards.



Note: The keeper bolts (1) are single use parts and must be discarded after use.

5. Remove the keeper bolts (1) from the door hinges (2).

   Discard the bolts.



Note: The door (1) can only be removed when it is opened to 50 degrees.

Note: Lift the door (2) upwards and outwards to disengage it from the vehicle (1).

6. Remove the door (2) from the vehicle (1) with the aid of an assistant.

Disassembly Procedure

1. Remove the door trim panel. Refer to Rear Side Door Trim Panel Replacement.
2. Remove the speaker. Refer to Radio Rear Side Door Speaker Replacement.
3. Remove the water deflector. Refer to Rear Side Door Water Deflector Replacement.
4. Remove the window inner belt sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
5. Remove the window inner weatherstrip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
6. Remove the window outer belt sealing strip. Refer to Rear Side Door Window Outer Sealing Strip Replacement.
7. Remove the window inner sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
8. Remove the rear door stationary window. Refer to Rear Side Door Window Frame Rear Applique Replacement
9. Remove the door window. Refer to Rear Side Door Window Replacement.
10. Remove the window regulator. Refer to Rear Side Door Window Regulator Replacement.
11. Remove the door frame applique. Refer to Rear Door Frame Applique Replacement.
12. Remove the door bottom auxiliary sealing strip. Refer to Rear Side Door Bottom Auxiliary Sealing Strip Replacement.
13. Remove the door latch. Refer to Rear Side Door Latch Replacement.
14. Remove the outside door handle. Refer to Rear Side Door Outside Handle Replacement.
15. Remove the door wiring harness. Refer to Front Side Door Wiring Harness Replacement.
16. Remove the door check link. Refer to Rear Side Door Check Link Replacement.
17. Remove all of the plastic nuts, grommets and retainers from the door.

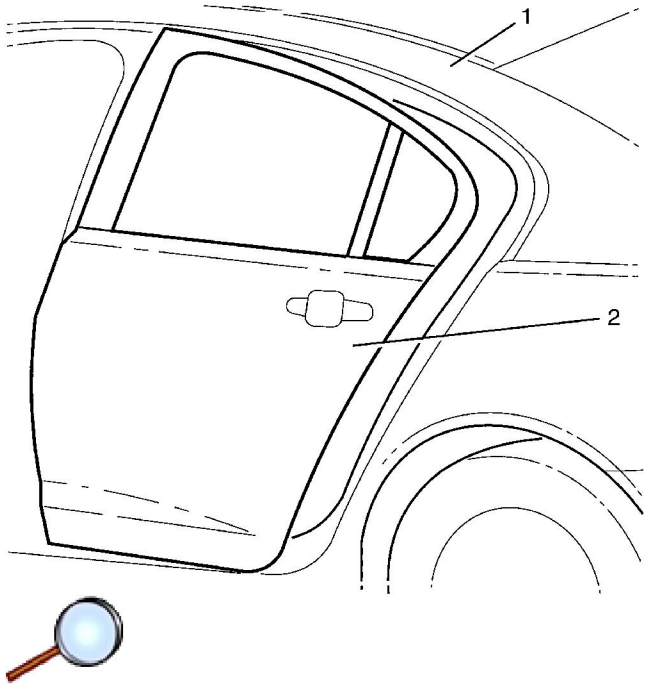
Assembly Procedure

1. Install all the plastic nuts, grommets and retainers into the door shell that were removed during disassembly.
2. Install the door check link. Refer to Rear Side Door Check Link Replacement.
3. Install the door wiring harness. Refer to Front Side Door Wiring Harness Replacement.
4. Install the outside door handle. Refer to Rear Side Door Outside Handle Replacement.
5. Install the door latch. Refer to Rear Side Door Latch Replacement.
6. Install the window inner sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
7. Install the rear door stationary window. Refer to Rear Side Door Window Frame Rear Applique Replacement.
8. Install the window inner sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
9. Install the window regulator. Refer to Rear Side Door Window Regulator Replacement.
10. Install the door window. Refer to Rear Side Door Window Replacement.
11. Install the door bottom auxiliary sealing strip. Refer to Rear Side Door Bottom Auxiliary Sealing Strip Replacement.
12. Install the door frame applique. Refer to Rear Door Frame Applique Replacement.
13. Install the window outer belt sealing strip. Refer to Rear Side Door Window Outer Sealing Strip Replacement.
14. Install the window inner belt sealing strip. Refer to Rear Side Door Window Inner

Weatherstrip Replacement.

15. Install the water deflector. Refer to Rear Side Door Water Deflector Replacement.
16. Install the speaker. Refer to Radio Rear Side Door Speaker Replacement.
17. Install the door trim panel. Refer to Rear Side Door Trim Panel Replacement.
18. Inspect for correct door adjustment. Refer to Door Adjustment.

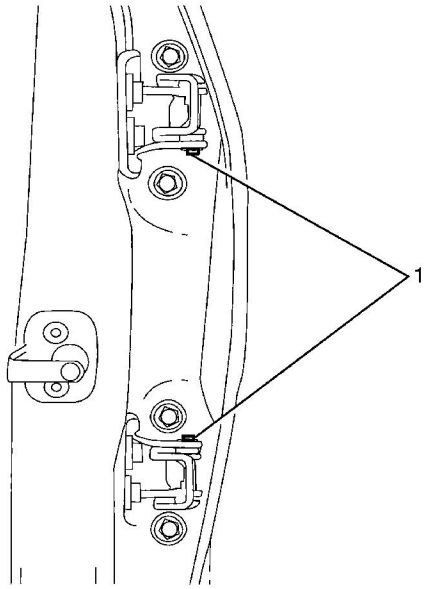
Installation Procedure



Note: The door (1) can only be installed when it is opened to 50 degrees.

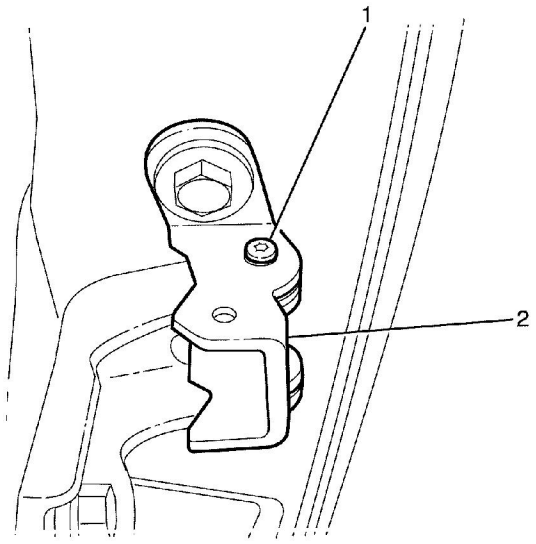
Note: Lower the door (2) downwards and inwards to engage it to the vehicle (1).

1. Install the door (2) to the vehicle (1) with the aid of an assistant.



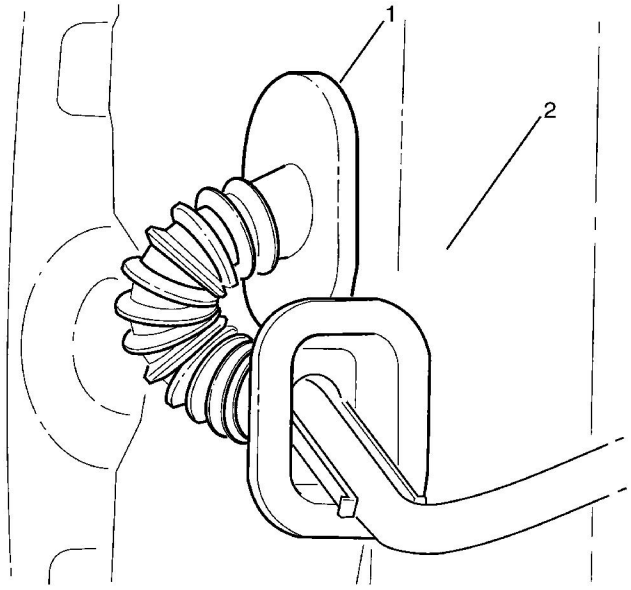
2. The keeper bolts (1) are located in the door hinges with the top door hinge keeper bolt facing downwards and the lower door hinge keeper bolt facing upwards.

Caution: Refer to Fastener Caution in the Preface section.



Note: Do Not over tighten the NEW keeper bolts as this will cause the door hinges to squeak.

3. Install the NEW keeper bolts (1) to the door hinges (2) and tighten to **3 N-m (27 lb in)**.
4. Connect the door wiring harness to the body wiring harness electrical connector.



5. Install the rubber conduit (1) to the pillar (2).
6. Install the check link to pillar retaining bolt. Refer to Rear Side Door Check Link Replacement.

Front Fender Replacement

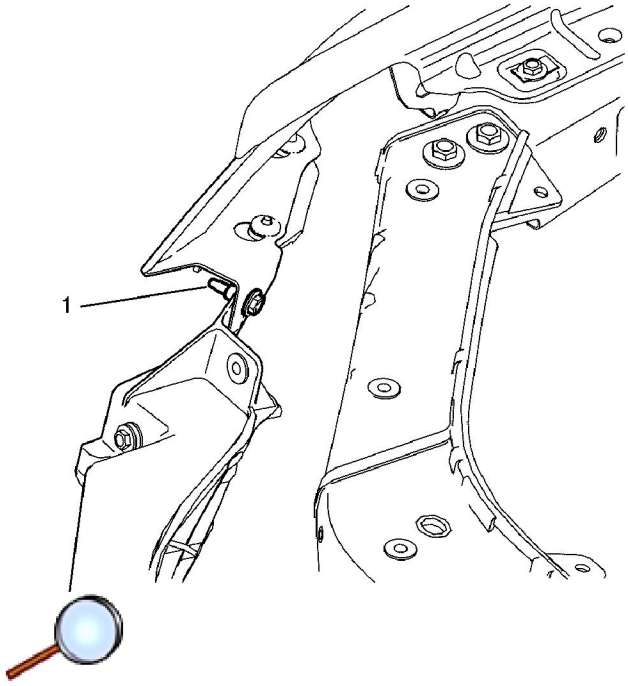
Removal Procedure

Danger: To avoid any vehicle damage, serious personal injury or death when major components are removed from the vehicle and the vehicle is supported by a hoist, support the vehicle with jack stands at the opposite end from which the components are being removed and strap the vehicle to the hoist.

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.

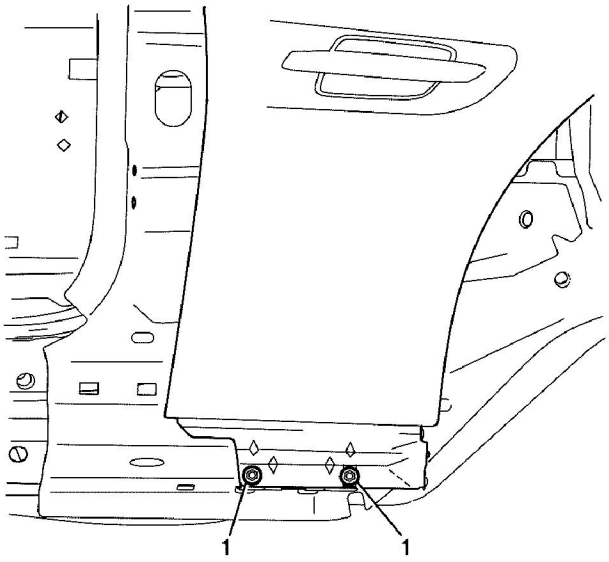
Warning: Refer to Safety Glasses Warning in the Preface section.

2. Apply tape to corners of panel and adjacent surfaces to help prevent paint damage.
3. Remove the hood. Refer to Hood Replacement.
4. Remove the hood hinge. Refer to Hood Hinge Replacement.
5. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
6. Remove the front wheel. Refer to Tire and Wheel Removal and Installation.
7. Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement.
8. Remove the front fender sound insulator. Refer to Front Fender Insulator Replacement.
9. Remove the rocker panel moulding. Refer to Rocker Panel Molding Replacement.
10. Remove the front bumper fascia. Refer to Front Bumper Fascia Replacement.
11. Remove the front bumper fascia bracket. Refer to Front Bumper Impact Bar Bracket Replacement.
12. Remove the headlamp. Refer to Headlamp Replacement.
13. Remove the side indicator. Refer to Repeater Lamp Replacement.

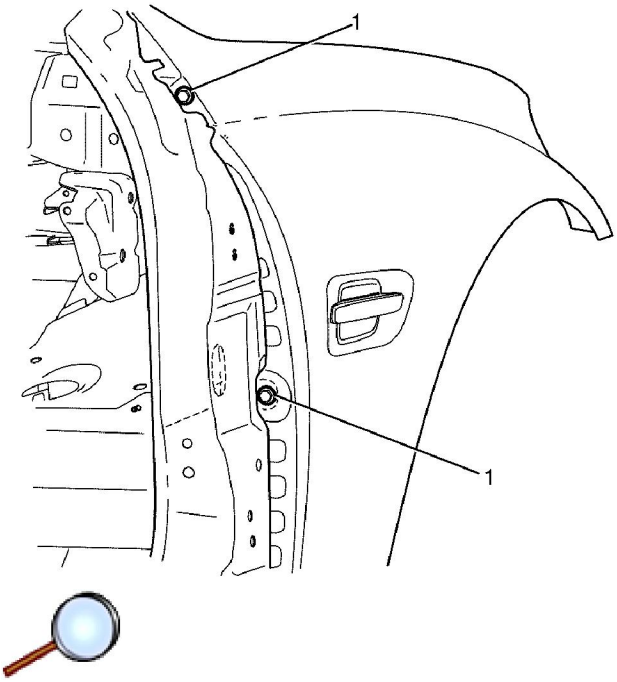


14. Remove the front fender to front end module retaining bolt (1).

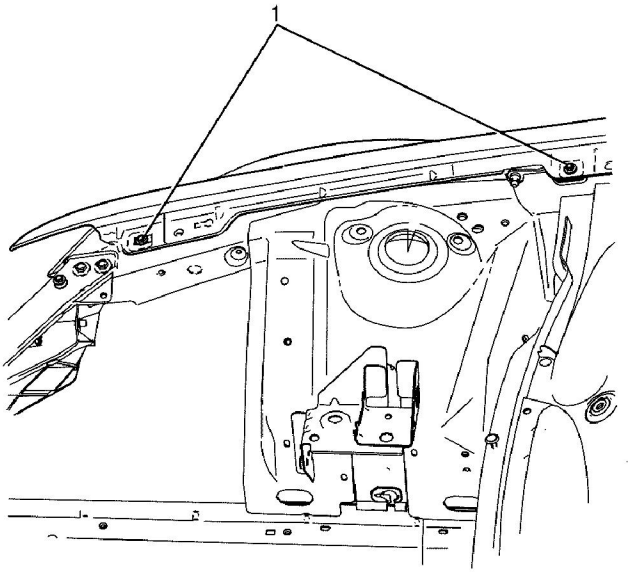
© 2010 General Motors Corporation. All rights reserved.



15. Remove the front fender to body side retaining bolts (1).

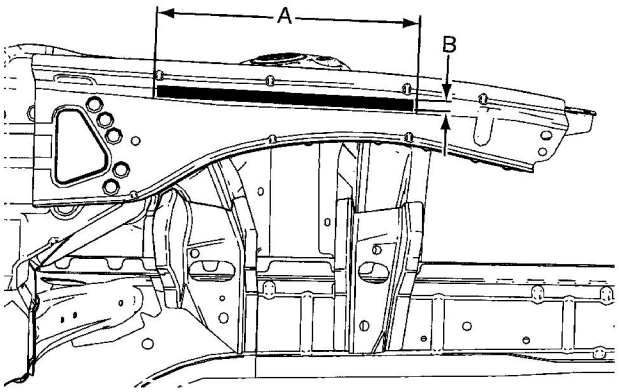


16. Remove the front fender to door pillar retaining bolts (1).



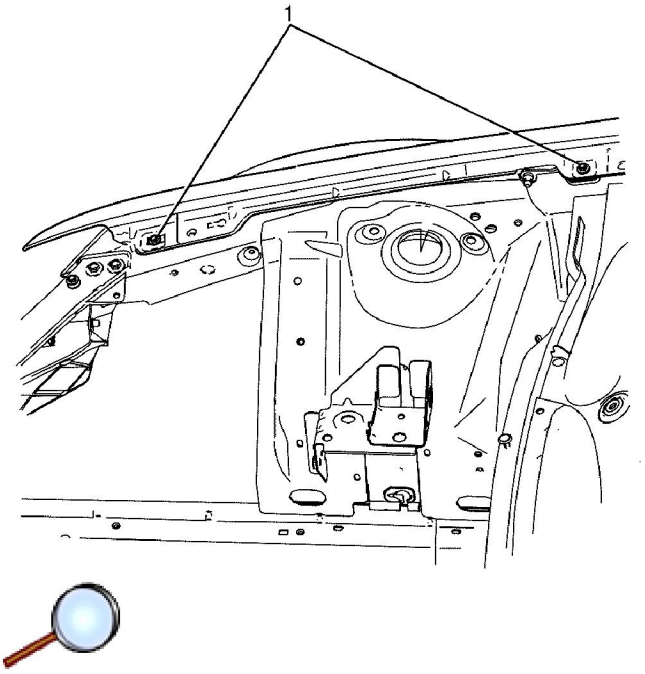
17. Remove the front fender to inner wheelhouse retaining bolts (1).
18. Remove the front fender from the vehicle.

Installation Procedure



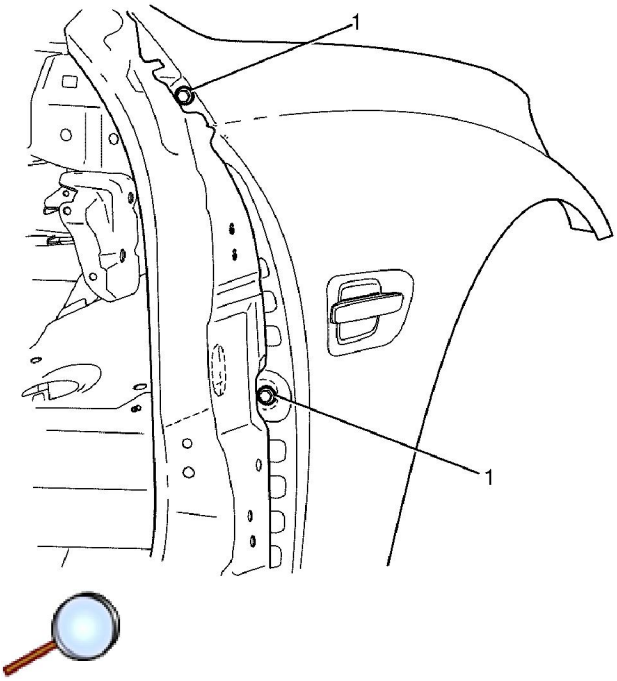
1. Apply an even amount of urethane GMW3041 or equivalent (Between the second and fourth swage (A) and 25 mm wide (B) of the upper wheelhouse brace).
2. Position the front fender to the vehicle.

Caution: Refer to Fastener Caution in the Preface section.



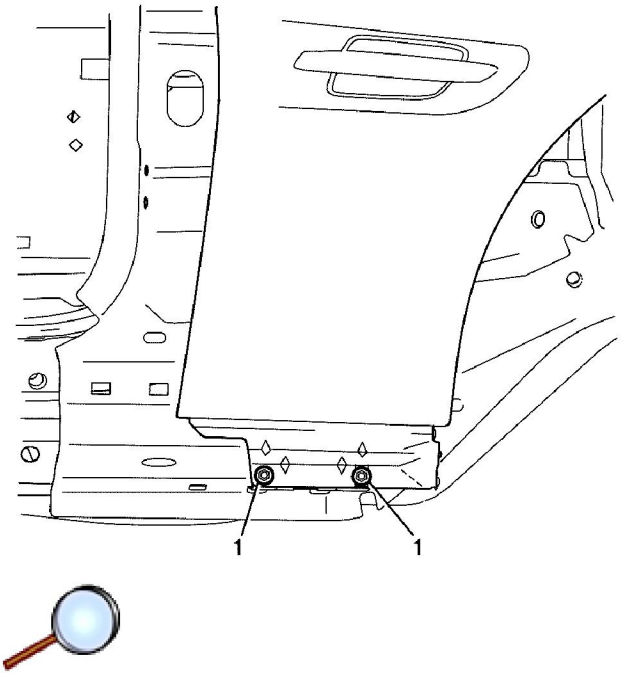
Note: Do not fully tighten at this stage.

3. Install the front fender to inner wheelhouse retaining bolts (1).



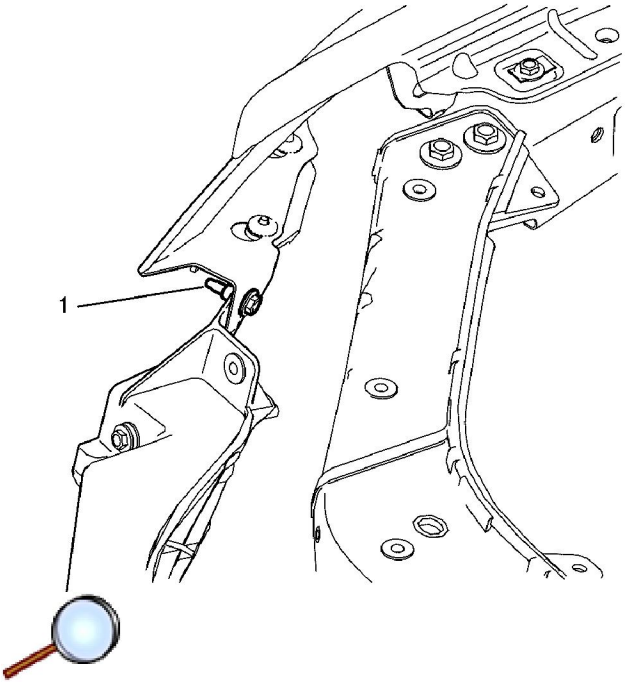
Note: Do not fully tighten at this stage.

4. Install the front fender to door pillar retaining bolts (1).



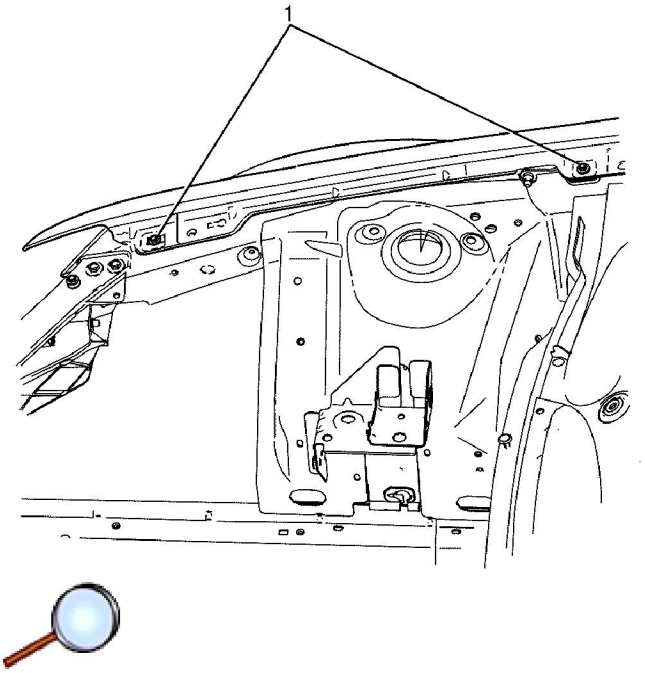
Note: Do not fully tighten at this stage.

5. Install the front fender to body side retaining bolts (1)

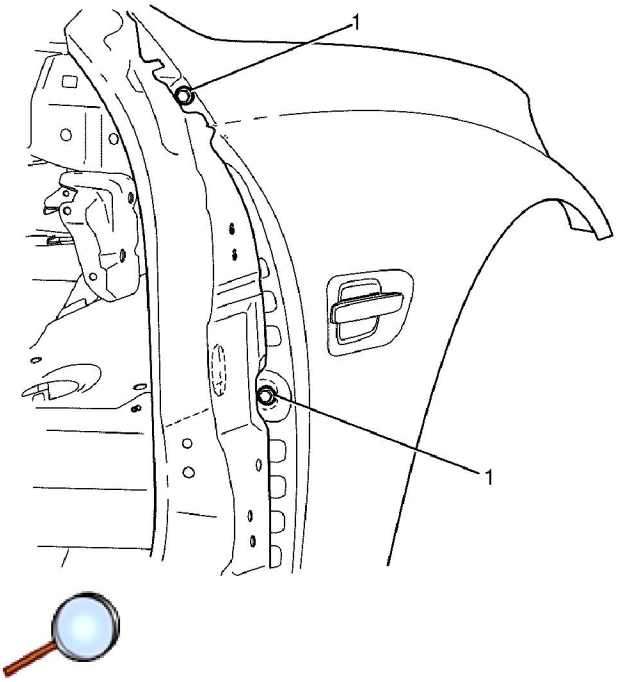


Note: Do not fully tighten at this stage.

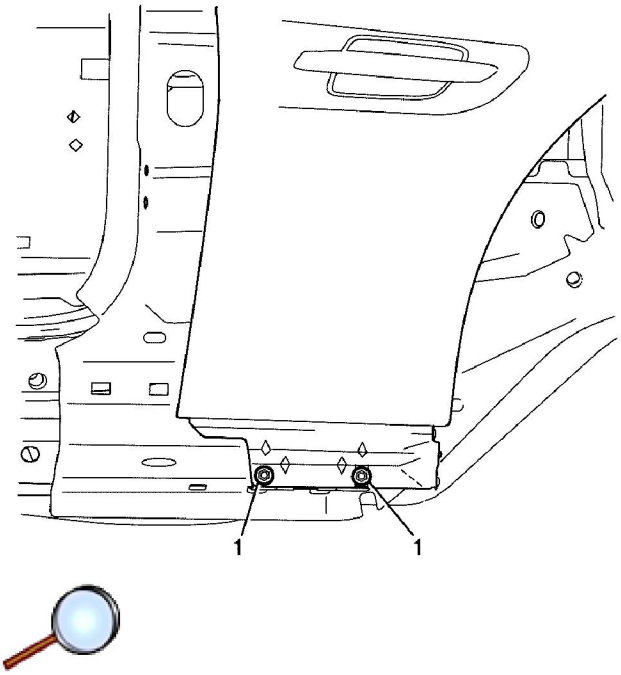
6. Install the front fender to front end module retaining bolt (1)
7. Install the front wheel. Refer to Tire and Wheel Removal and Installation.
8. Lower the vehicle.



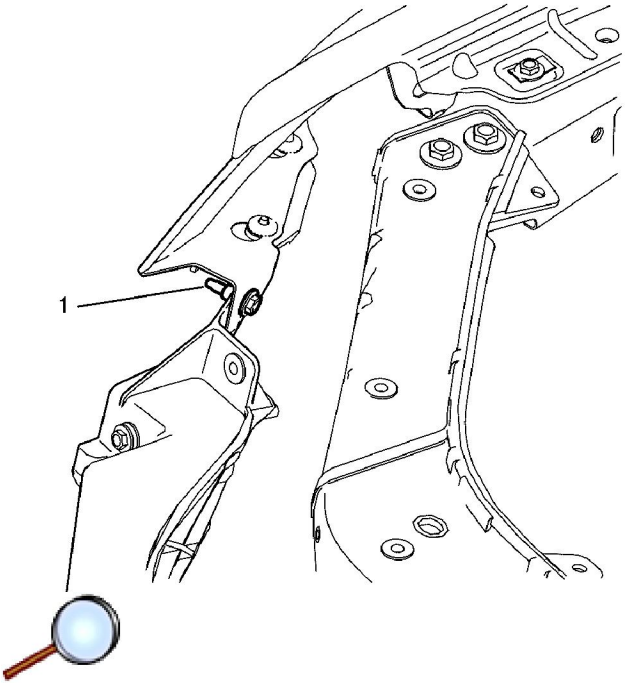
9. Tighten the front fender to inner wheelhouse retaining bolts (1) to **9 N·m (80 lb in)**.



10. Tighten the front fender to door pillar retaining bolts (1) to **9 N·m (80 lb in)**.



11. Tighten the front fender to body side retaining bolts (1) to **9 N·m (80 lb in)**.



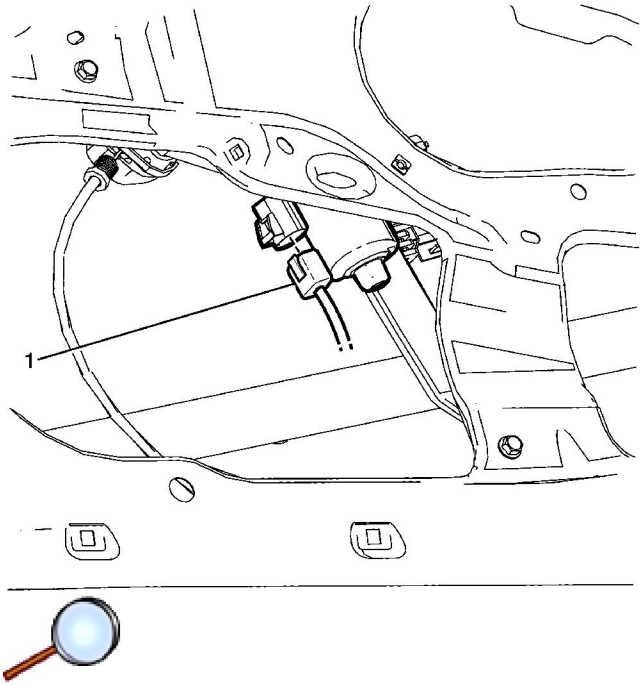
12. Tighten the front fender to front end module retaining bolt (1) to **9 N·m (80 lb in)**.
13. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
14. Remove the front wheel. Refer to Tire and Wheel Removal and Installation.
15. Install the front fender sound insulator. Refer to Front Fender Insulator Replacement.
16. Install the side indicator. Refer to Repeater Lamp Replacement.
17. Install the rocker panel moulding. Refer to Rocker Panel Molding Replacement.
18. Install the headlamp. Refer to Headlamp Replacement.
19. Install the front bumper fascia bracket. Refer to Front Bumper Impact Bar Bracket Replacement.
20. Install the front bumper fascia. Refer to Front Bumper Fascia Replacement.
21. Install the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement.
22. Install the front wheel. Refer to Tire and Wheel Removal and Installation.
23. Lower the vehicle.

24. Install the hood hinge. Refer to Hood Hinge Replacement.
25. Install the hood. Refer to Hood Replacement.
26. Carefully remove the tape from the corners of the panels and adjacent surfaces.

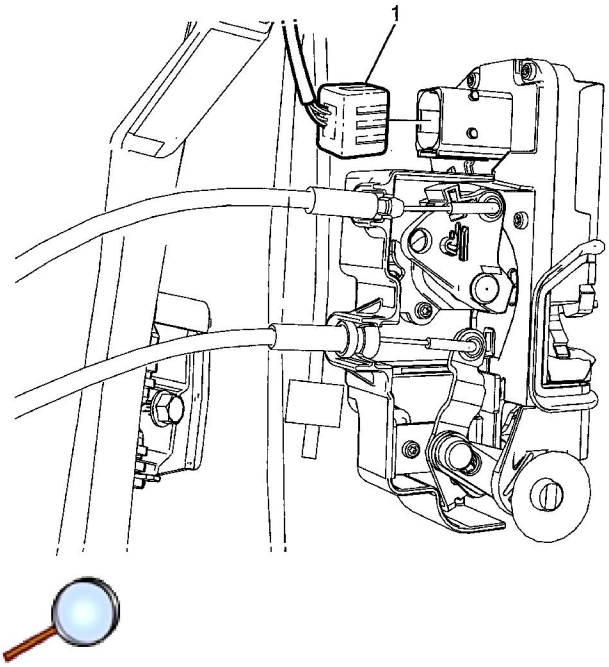
Front Side Door Wiring Harness Replacement

Removal Procedure

1. Remove the door trim panel. Refer to Front Side Door Trim Panel Replacement .
2. Remove the speaker. Refer to Radio Front Side Door Lower Speaker Replacement .
3. Remove the water deflector. Refer to Front Side Door Water Deflector Replacement .

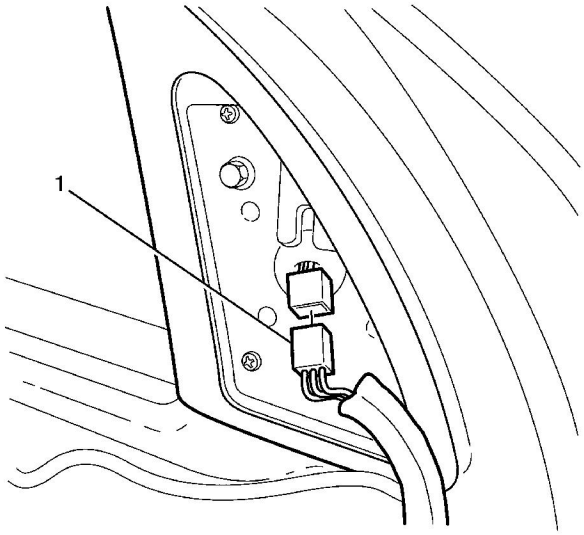


4. Disconnect the window regulator electrical connector (1).

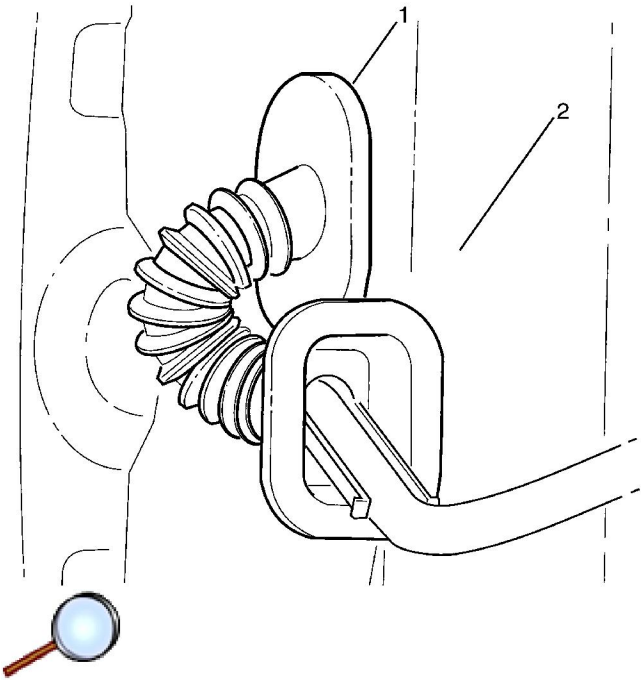


5. Disconnect the door latch electrical connector (1).

© 2010 General Motors Corporation. All rights reserved.

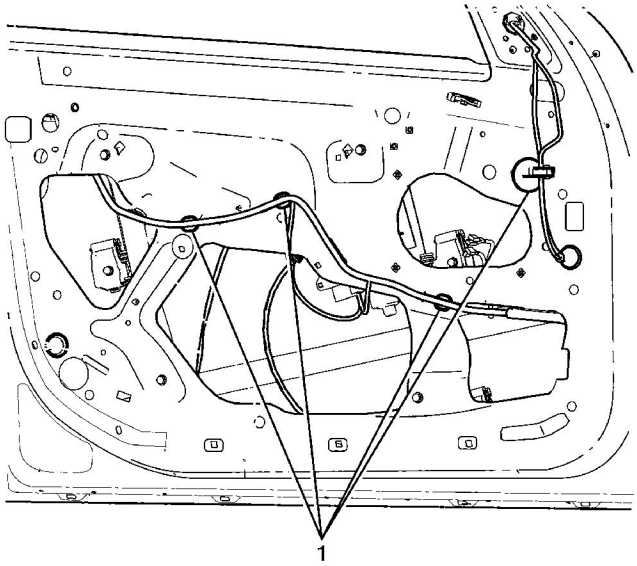


6. Disconnect the outside rearview mirror electrical connector (1).



Important: Pull the rubber conduit (1) from the pillar (2) to expose the door to body wiring harness plug.

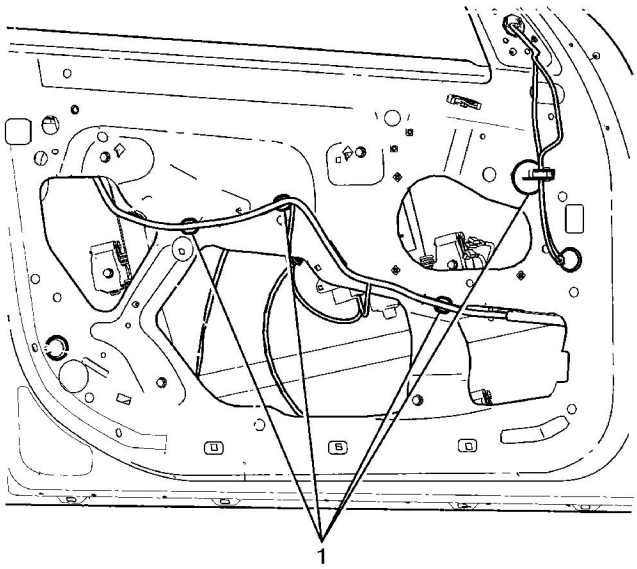
7. Remove the rubber conduit (1) from the from the pillar (2).
8. Disconnect the door wiring harness from the body wiring harness.
9. Push the wiring harness grommet and connector into the door cavity.



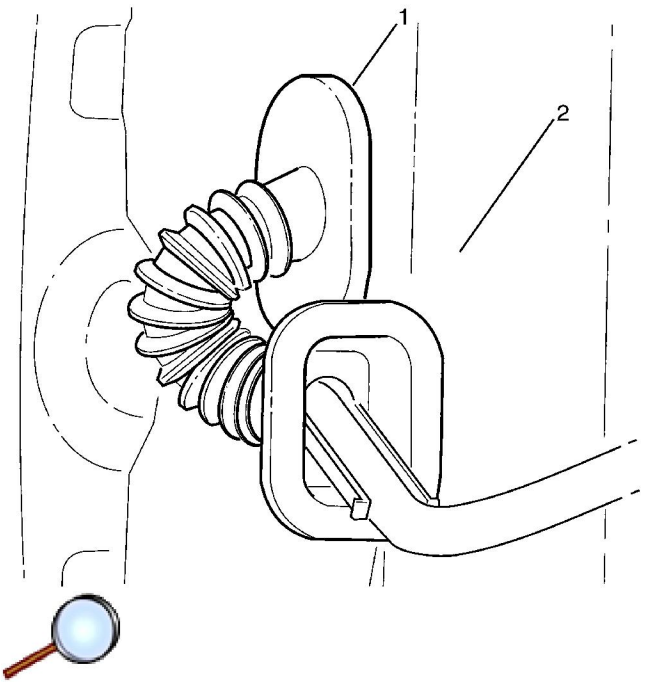
10. Disconnect the retainers securing the wiring harness to the door (1).
11. Remove the wiring harness from the door.

Installation Procedure

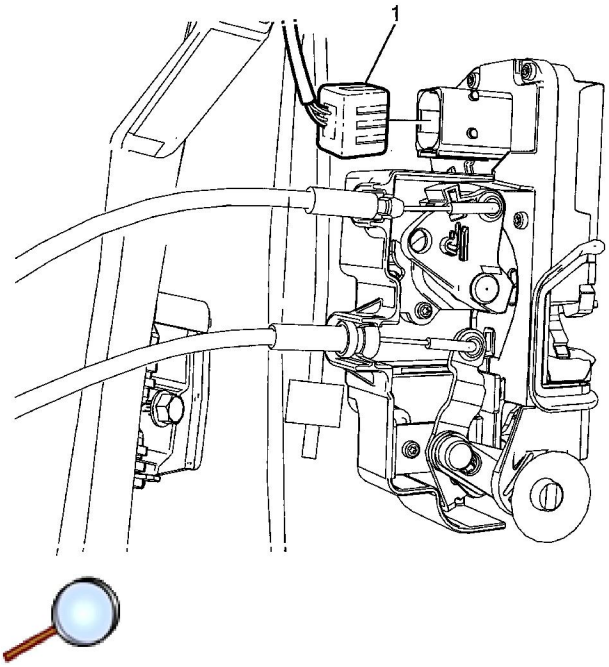
1. Position the door wiring harness into the door cavity.



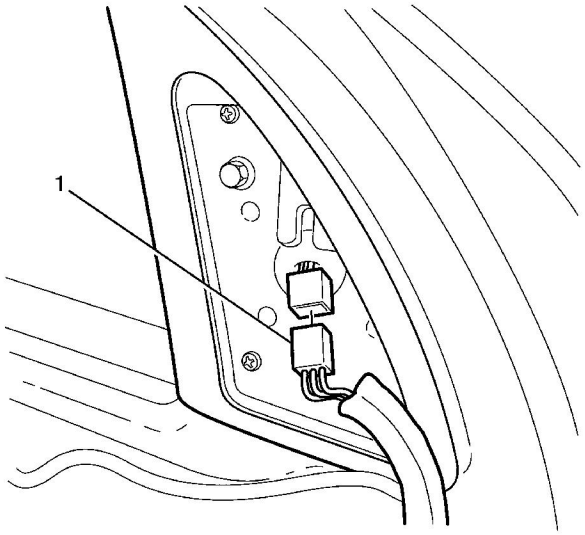
2. Connect the wiring harness retainers to the door (1).
3. Feed the trim panel connectors through the door .
4. Connect the door wiring harness to body wiring harness electrical connector.



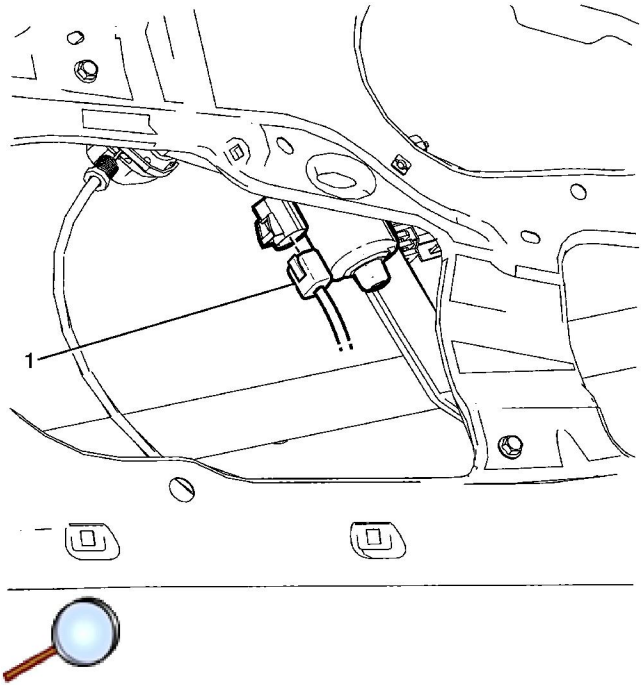
5. Install the rubber conduit (1) to the pillar (2).



6. Connect the door latch electrical connector (1).



7. Connect the outside rearview mirror electrical connector (1).

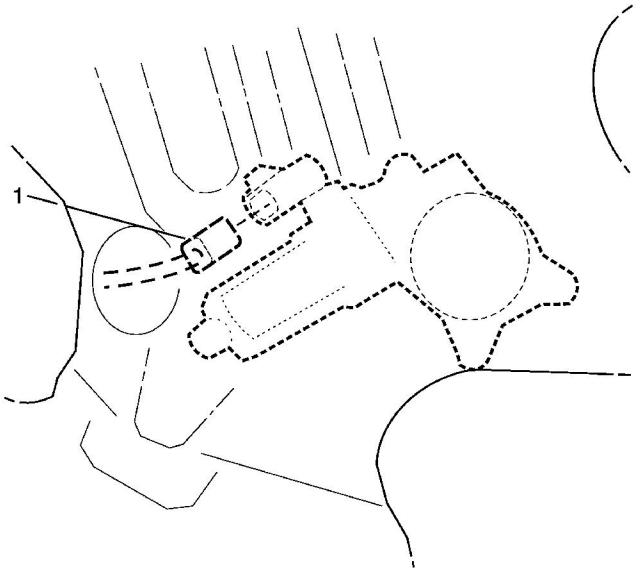


8. Connect the window regulator electrical connector (1).
9. Install the water deflector. Refer to Front Side Door Water Deflector Replacement .
10. Install the speaker. Refer to Radio Front Side Door Lower Speaker Replacement .
11. Install the door trim panel. Refer to Front Side Door Trim Panel Replacement .

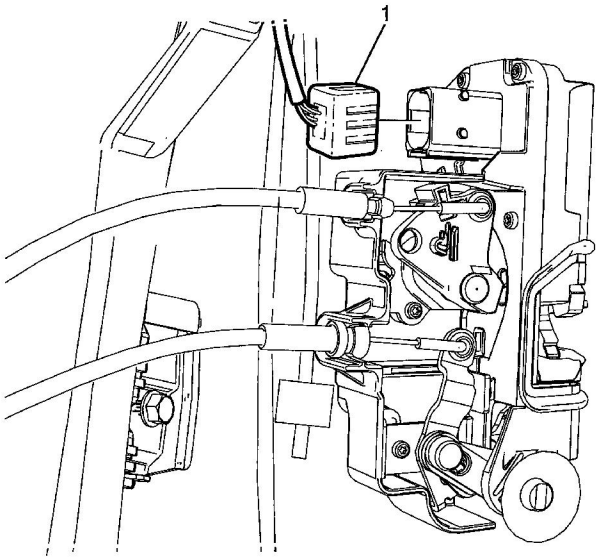
Rear Side Door Wiring Harness Replacement

Removal Procedure

1. Remove the door trim panel. Refer to Rear Side Door Trim Panel Replacement.
2. Remove the speaker. Refer to Radio Rear Side Door Speaker Replacement.
3. Remove the water deflector. Refer to Rear Side Door Water Deflector Replacement.

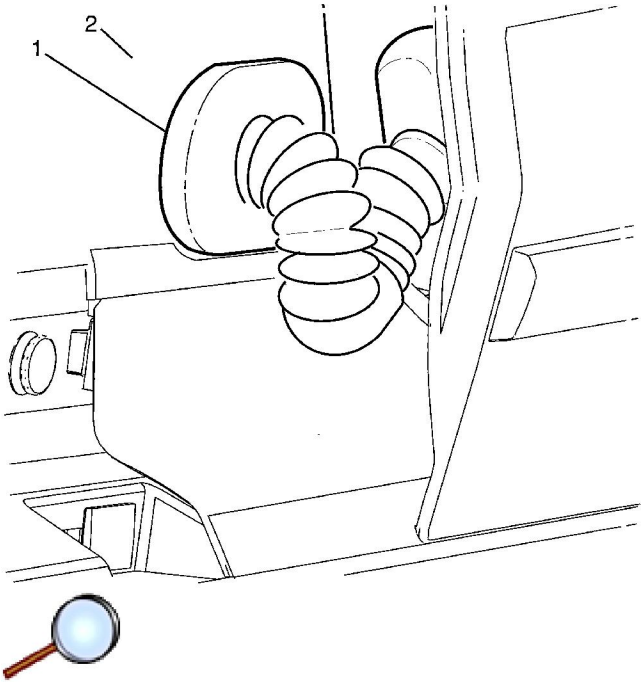


4. Disconnect the window regulator electrical connector (1).



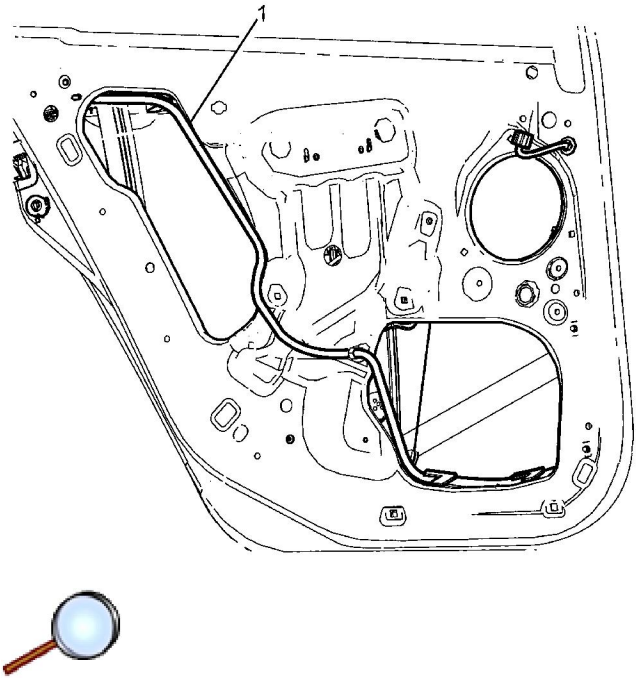
5. Disconnect the door latch electrical connector (1).

© 2010 General Motors Corporation. All rights reserved.



Note: Pull the rubber conduit (1) from the pillar (2) to expose the door to body wiring harness plug.

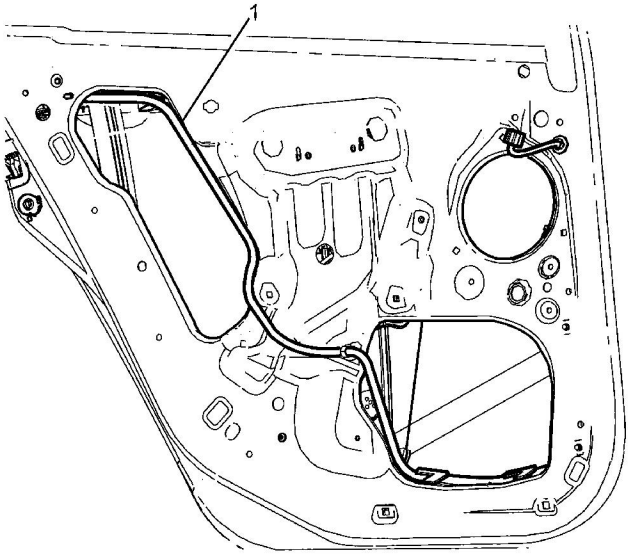
6. Remove the rubber conduit (1) from the from the pillar (2).
7. Disconnect the door wiring harness from the body wiring harness.
8. Push the wiring harness grommet and connector into the door cavity.



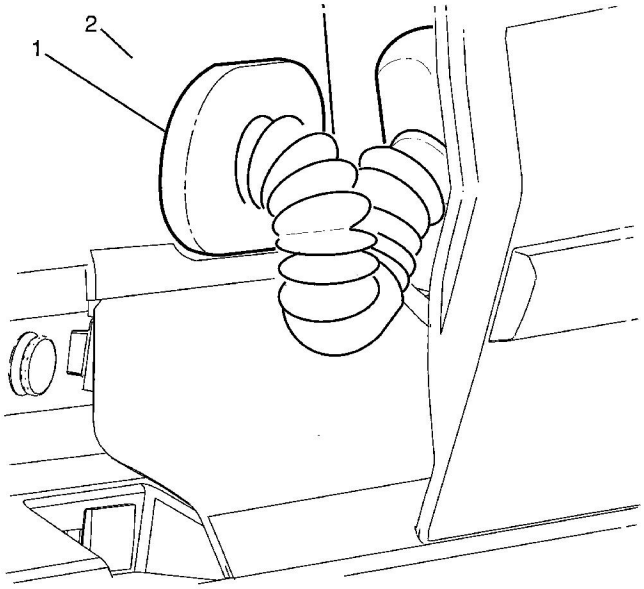
9. Disconnect the retainers securing the wiring harness (1) to the door.
10. Remove the wiring harness (1) from the door.

Installation Procedure

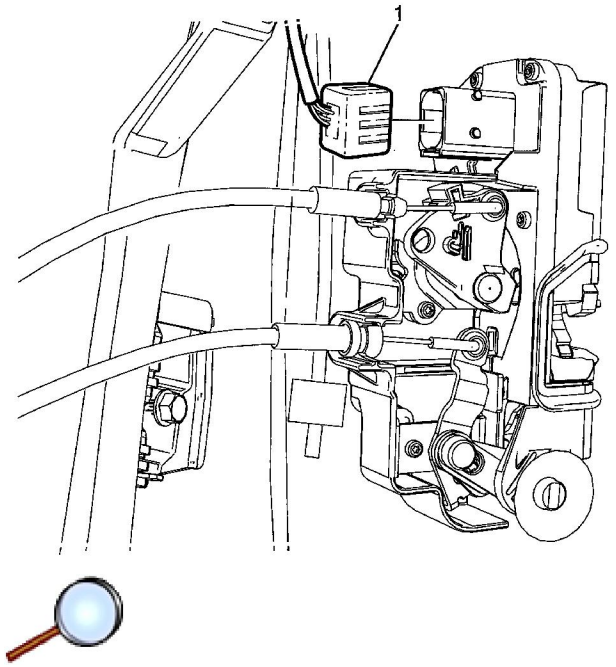
1. Position the door wiring harness into the door cavity.



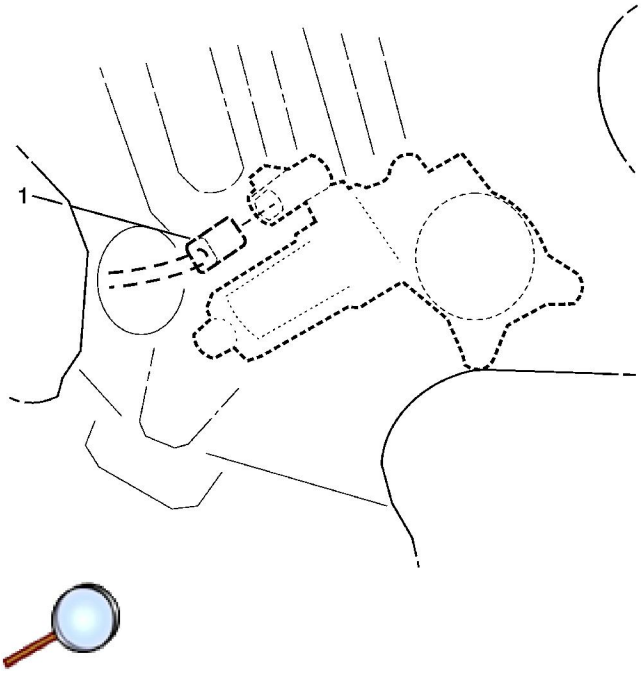
2. Connect the wiring harness (1) retainers to the door.
3. Feed the door trim panel connectors through the door.
4. Connect the door wiring harness to body wiring harness electrical connector.



5. Install the rubber conduit (1) to the pillar (2).



6. Connect the door latch electrical connector (1).

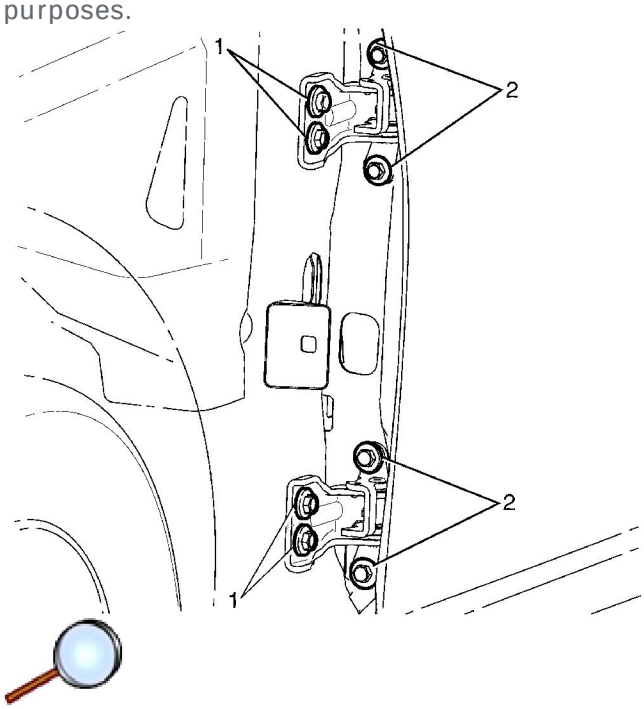


7. Connect the window regulator electrical connector (1).
8. Install the water deflector. Refer to Rear Side Door Water Deflector Replacement.
9. Install the speaker. Refer to Radio Rear Side Door Speaker Replacement.
10. Install the door trim panel. Refer to Rear Side Door Trim Panel Replacement.

Front Side Door Upper Hinge and Lower Hinge Replacement

Removal Procedure

1. Remove the front fender. Refer to Front Fender Replacement.
2. Mark the door hinge to pillar and door hinge to door location for installation alignment purposes.



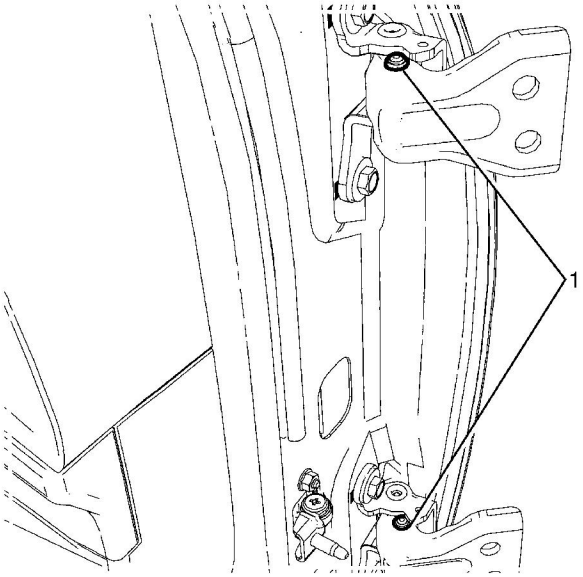
Note: Replace one hinge at a time then repeat procedure for the second hinge if needed.

Note: Remove the door hinge with the door fully latched on the striker.

3. Remove the door hinge to door retaining bolts (2).
4. Remove the door hinge to pillar retaining bolts (1) and remove the door hinges one at a time.

Installation Procedure

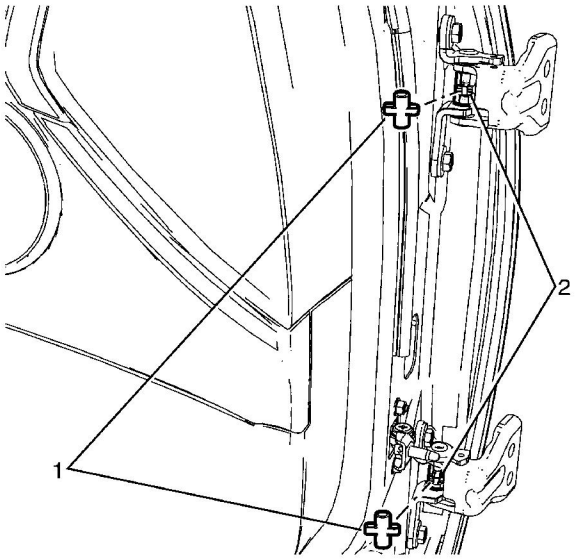
© 2010 General Motors Corporation. All rights reserved.



Note: Paint pins (1) are installed in NEW door hinges and must be removed when fitted.

Note: Use a suitable tool to pry the paint pins (1) from the NEW door hinges.

1. Remove the paint pins (1) from the NEW door hinges.



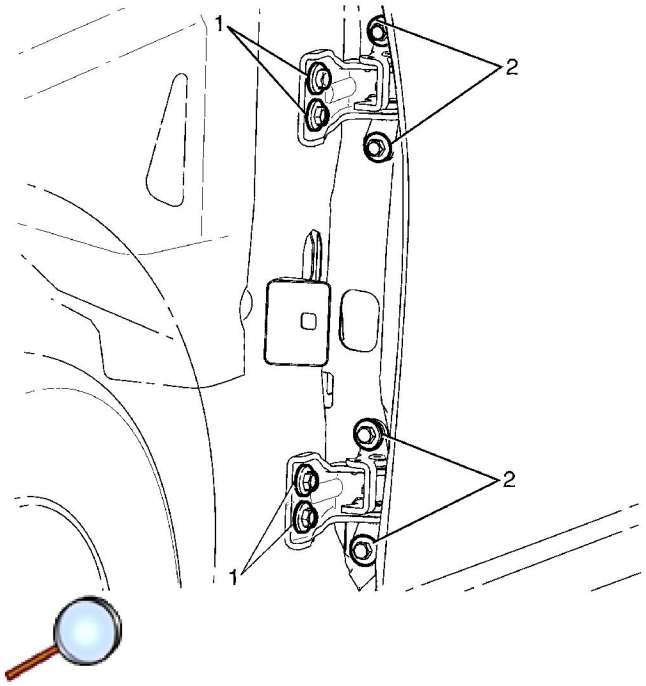
Note: The shipping clips (1) are only to hold the NEW door hinges (2) together in transit and must be removed when fitted.

Note: Use a suitable tool to remove the shipping clips (1) from the NEW door hinges (2).

2. Remove the shipping clips (1) from the NEW door hinges (2).

3. Align the door hinge to pillar and door hinge to door marks made prior to removal.

   Caution: Refer to Fastener Caution in the Preface section.



4. Install the door hinge to pillar retaining bolts (1) and tighten to **28 N·m (21 lb ft)**.
5. Install the door hinge to door retaining bolts (2) and tighten to **28 N·m (21 lb ft)**.
6. Install the front fender. Refer to Front Fender Replacement.
7. Adjust the door. Refer to Door Adjustment.

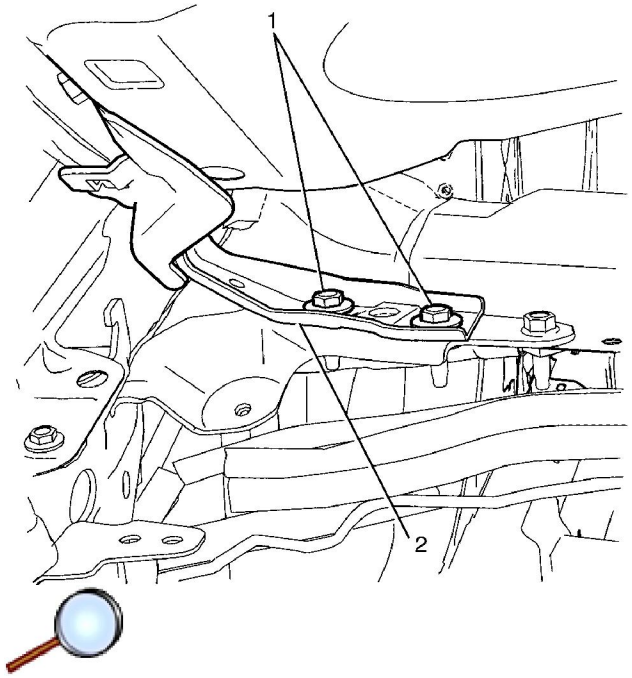
Hood Hinge Replacement

Removal Procedure

1. Apply tape to the corners of the panels and adjacent surfaces.

   Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

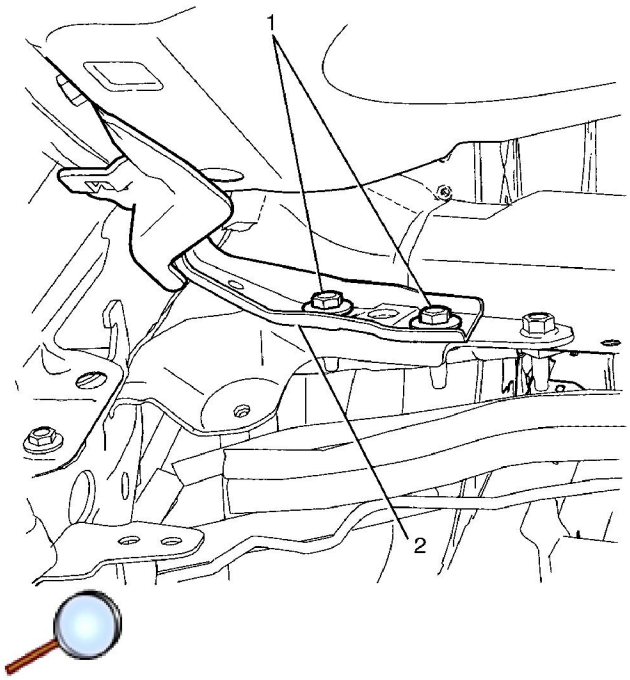
2. Remove the hood. Refer to Hood Replacement.
3. Remove the air inlet grille panel. Refer to Air Inlet Grille Panel Replacement.



4. Remove the hood hinge to dash and cowl panel brace retaining bolts (1).
5. Remove the hood hinge (2) from the vehicle.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



1. Install the hood hinge (2) to the vehicle.

   Caution: Refer to Fastener Caution in the Preface section.

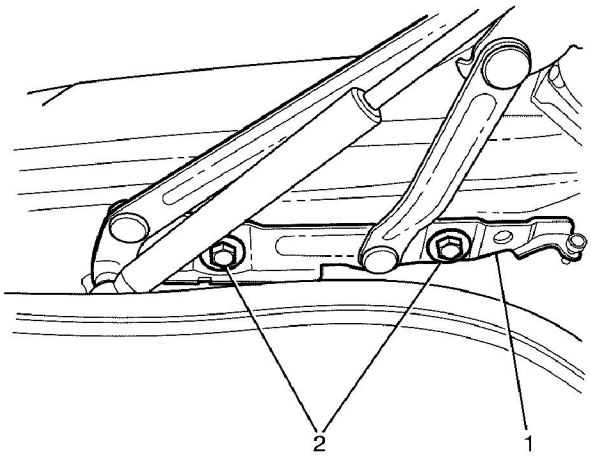
2. Install the hood hinge to dash and cowl panel brace retaining bolts (1) and tighten to **20 N·m (15 lb ft)**.
3. Install the air inlet grille panel. Refer to Air Inlet Grille Panel Replacement.
4. Install the hood. Refer to Hood Replacement.
5. Adjust the hood as necessary. Refer to Hood Adjustment.
6. Carefully remove the tape from the corners of the panels and adjacent surfaces.

Rear Compartment Lid Hinge Replacement

Removal Procedure

Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

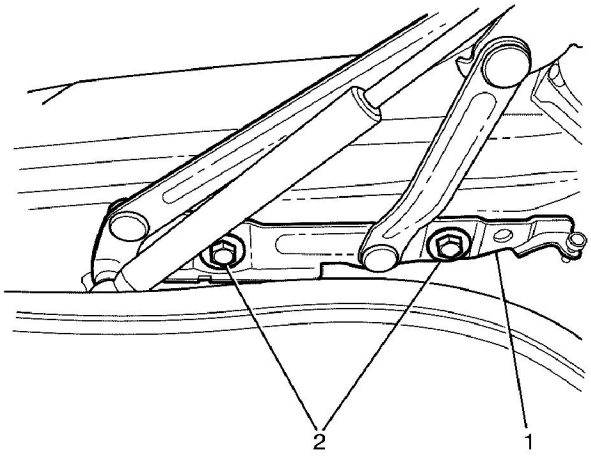
1. Remove the rear compartment lid strut. Refer to Rear Compartment Lid Strut Replacement.
2. Using a wax pencil, mark the retaining nut and bolt locations on both the rear compartment lid and the rear quarter panel of the hinge being replaced.
3. Remove the rear compartment lid. Refer to Rear Compartment Lid Replacement.



4. Remove the rear compartment lid hinge to rear quarter panel retaining bolts (2).
5. Remove the rear compartment lid hinge (1) from the rear quarter panel.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



1. Install the rear compartment lid hinge (1) to the rear quarter panel.
2. Install the rear compartment lid hinge to rear quarter panel retaining bolts (2).

Important: Do not fully tighten the rear compartment lid hinge retaining bolts (2) at this stage.

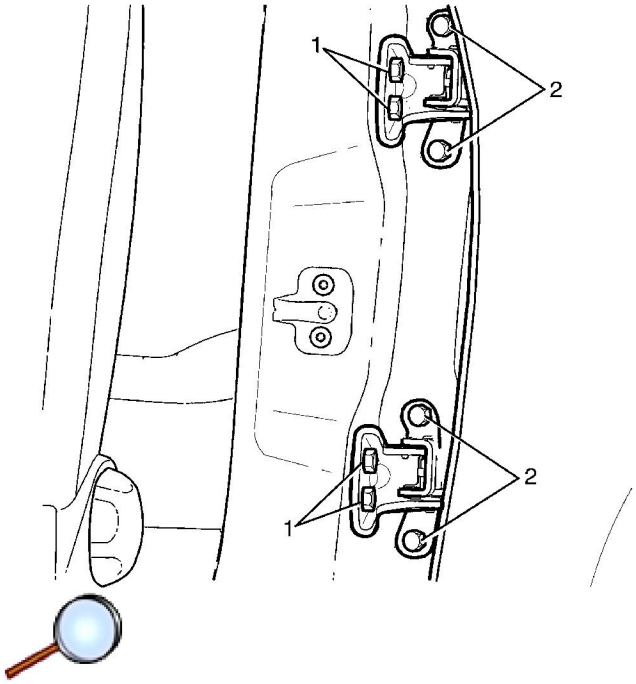
Do not fully tighten at this stage.

3. Install the rear compartment lid. Refer to Rear Compartment Lid Replacement.
4. Install the rear compartment lid strut. Refer to Rear Compartment Lid Strut Replacement.
5. Check and adjust the rear compartment lid as necessary. Refer to Rear Compartment Lid Adjustment.

Rear Side Door Upper Hinge and Lower Hinge Replacement

Removal Procedure

1. Open front doors.
2. Mark the hinge to pillar and hinge to door location for installation alignment purposes.



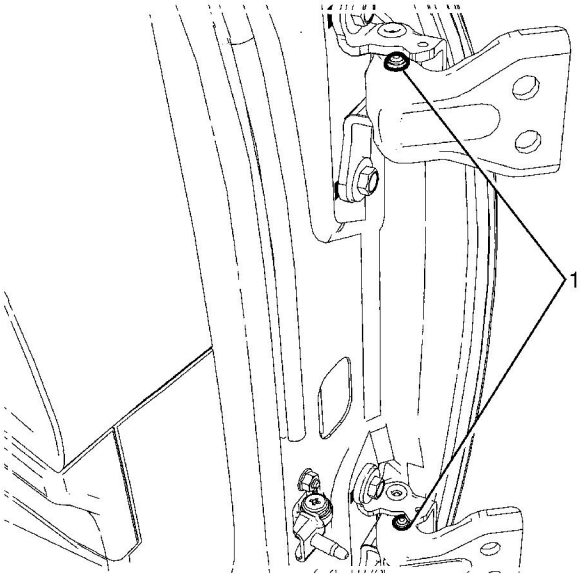
Note: Replace one hinge at a time then repeat procedure for the second hinge if needed.

Note: Remove the door hinge with the door fully latched on the striker.

3. Remove the hinge to door retaining bolts (2).
4. Remove the hinge to pillar retaining bolts (1) and remove the hinges one at a time.

Installation Procedure

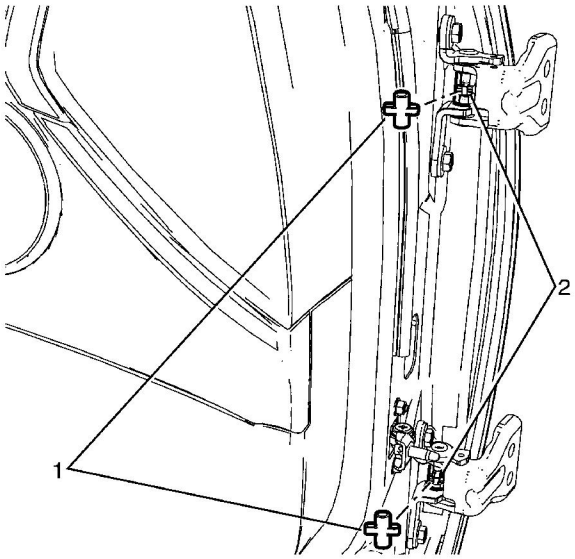
© 2010 General Motors Corporation. All rights reserved.



Note: Paint pins (1) are installed in NEW hinges and must be removed when fitted.

Note: Use a suitable tool to pry the paint pins (1) from the door hinges.

1. Remove the paint pins (1) from the NEW door hinges.



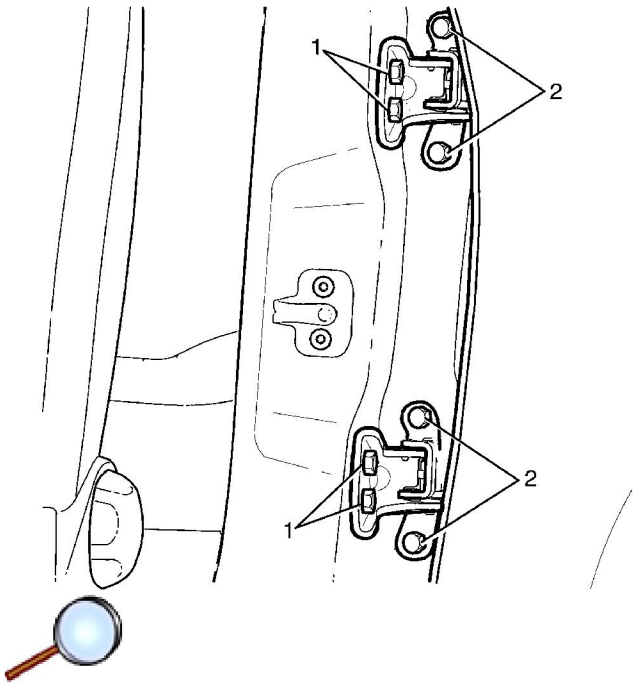
Note: The shipping clips (1) are only to hold the NEW door hinges (2) together in transit and must be removed when fitted.

Note: Use a suitable tool to remove the shipping clips (1) from the NEW door hinges (2).

2. Remove the shipping clips (1) from the NEW door hinges (2).

3. Align the hinge to pillar and hinge to door marks made prior to removal.

Caution: Refer to Fastener Caution in the Preface section.



4. Install the hinge to pillar retaining bolts (1) and tighten to **28 N·m (21 lb ft)**.
5. Install the hinge to door retaining bolts (2) and tighten to **28 N·m (21 lb ft)**.
6. Close the front doors.

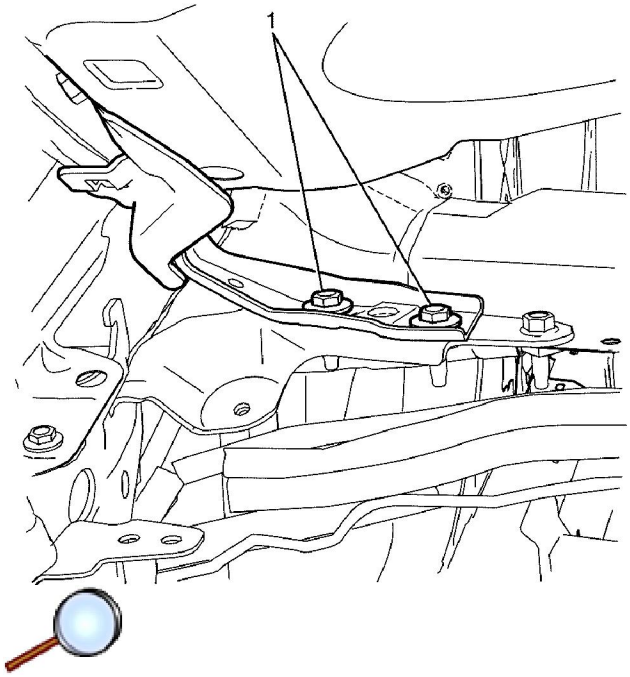
Caution: Striker alignment is a crucial part of door latch operation. Do not use the door striker to adjust the door to the vehicle. Failure to properly adjust the striker can result in damage to the door latch and the striker.

7. Adjust the door. Refer to Door Adjustment.

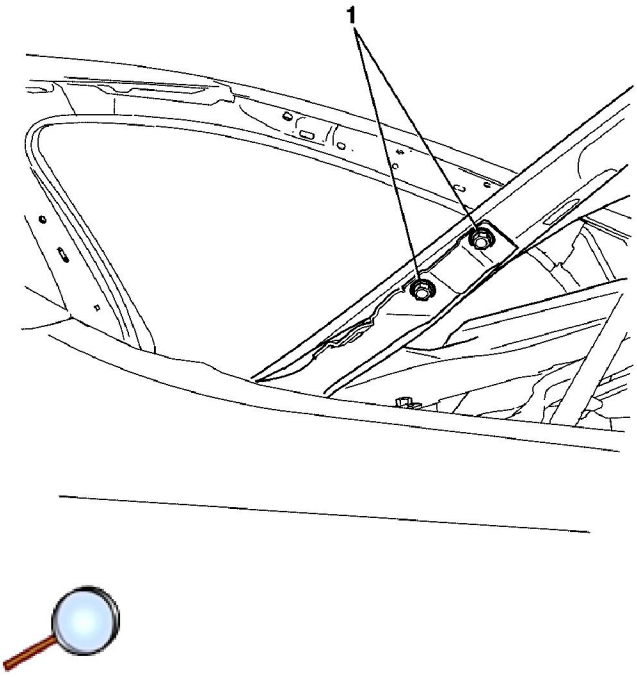
Hood Adjustment

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Install a suitable hood brace to the vehicle.



2. Loosen the hood hinge to dash and cowl panel brace retaining bolts (1).



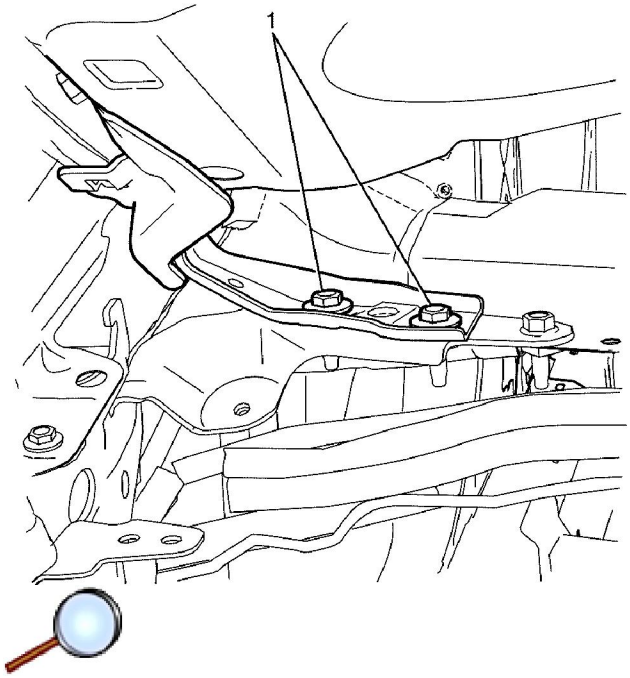
3. Loosen the hood hinge to hood retaining bolts (1).
4. Adjust the hood to obtain an even gap between 2.25 mm to 3.75 mm on both sides between the hood and the fenders, so that the hood is flush with both fenders on the front edge.

© 2010 General Motors Corporation. All rights reserved.

5. Adjust the hood to obtain an even gap between 2 mm to 6 mm between the hood and the front bumper fascia so that the hood is flush with the front bumper fascia.

   Caution: Refer to Fastener Caution in the Preface section.

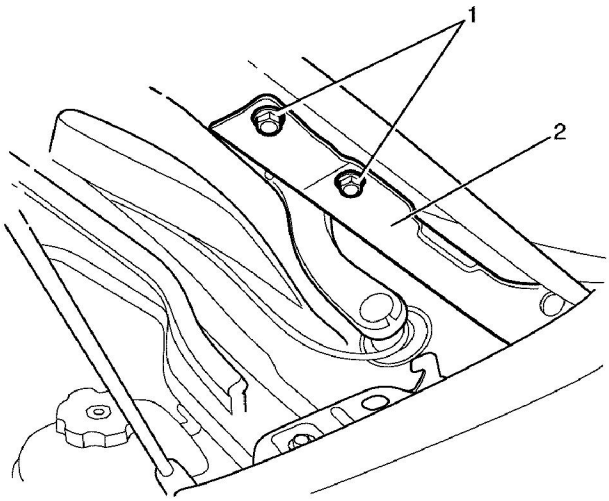
6. Tighten the hood hinge to hood retaining bolts (1) and tighten to **20 N·m (15 lb ft)**.



7. Tighten the hood hinge to dash and cowl panel brace retaining bolts (1) and tighten to **20 N·m (15 lb ft)**.

Hood Replacement

Removal Procedure



Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

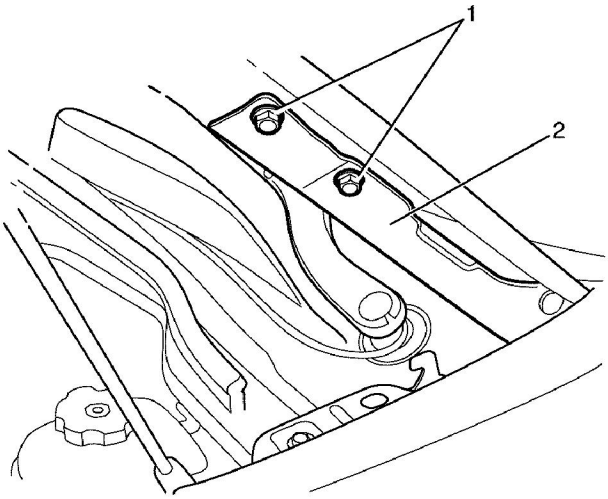
1. Install a suitable hood brace to the vehicle.
2. Apply tape to the corners of the panels and adjacent surfaces.
3. Using a suitable erasable marking pencil, mark the location of the hinge on the hood assembly.
4. Remove the hood bumpers from the hood. Refer to Hood Bumper Replacement.
5. Remove the hood air scoops. Refer to Hood Air Scoop Replacement.
6. Remove the hood insulator from the hood. Refer to Hood Insulator Replacement.
7. Remove the hood assist rods. Refer to Hood Open Assist Rod Replacement.
8. With the aid of an assistant, remove the hood to the hood hinge retaining bolts (1) from the hood assembly (2).

   Repeat for opposite side.

9. Remove the hood assembly (2) from the vehicle.
10. Remove the suitable hood brace from the vehicle.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. With the aid of an assistant, install the hood assembly (2) onto the vehicle.
2. Install the suitable hood brace to the vehicle.
3. Position the hood assembly (2) to the hood hinges using the previously marked positions, repeat this procedure for the opposite side.

Caution: Refer to Component Fastener Tightening Caution in the Preface section.

Note: Do not fully tighten at this stage.

4. Install the hood to hood hinge retaining bolts (1).
5. Install the hood assist rods. Refer to Hood Open Assist Rod Replacement.
6. Install the hood air scoops. Refer to Hood Air Scoop Replacement.
7. Install the hood insulator to the hood. Refer to Hood Insulator Replacement.
8. Install the hood bumpers to the hood. Refer to Hood Bumper Replacement.
9. Adjust the hood as necessary. Refer to Hood Adjustment.
10. Tighten the hood to the hood hinge retaining bolts (1) and tighten to **20 N·m (15 lb ft)**.
11. Remove the suitable brace from the vehicle.
12. Carefully remove the tape from the corners of the panels and adjacent surfaces.
13. Using a suitable lint free cloth, remove any residue left from the erasable alignment marks.

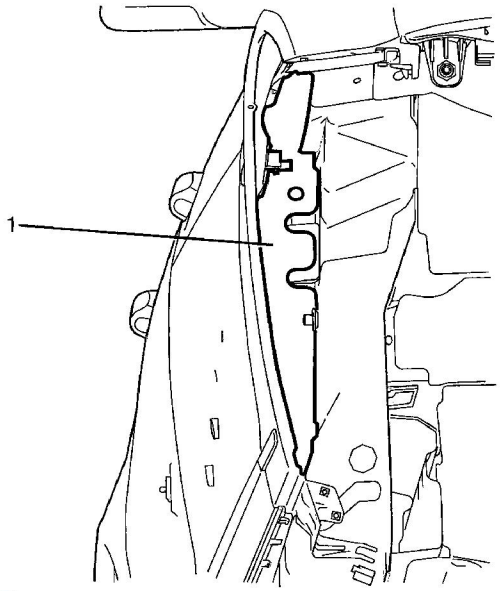
Front Fender Insulator Replacement

Removal Procedure

Warning: Refer to Safety Glasses Warning in the Preface section.

Danger: To avoid any vehicle damage, serious personal injury or death when major components are removed from the vehicle and the vehicle is supported by a hoist, support the vehicle with jack stands at the opposite end from which the components are being removed and strap the vehicle to the hoist.

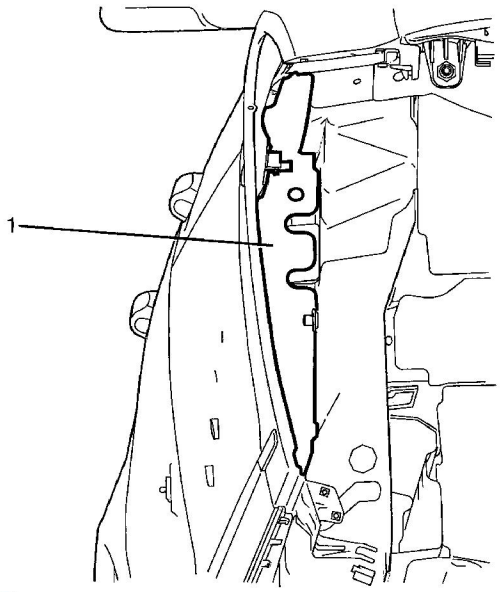
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Remove the front wheel. Refer to Tire and Wheel Removal and Installation.
3. Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement.
4. Remove the side indicator. Refer to Repeater Lamp Replacement.



5. Remove the front fender sound insulator (1) from the vehicle.

Installation Procedure

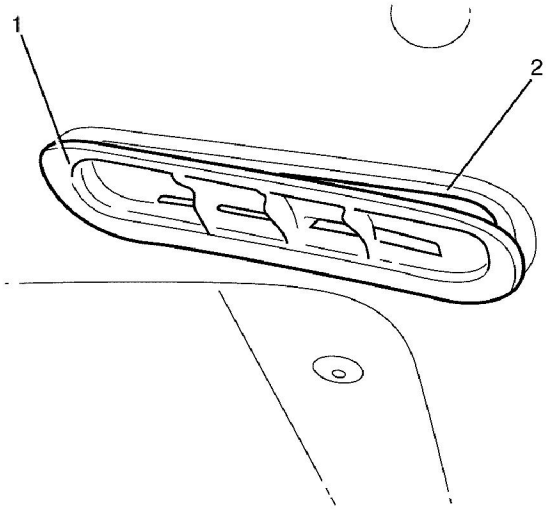
© 2010 General Motors Corporation. All rights reserved.



1. Install the front fender sound insulator (1) to the vehicle.
2. Install the side indicator. Refer to Repeater Lamp Replacement.
3. Install the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement.
4. Install the front wheel. Refer to Tire and Wheel Removal and Installation.
5. Lower the vehicle.

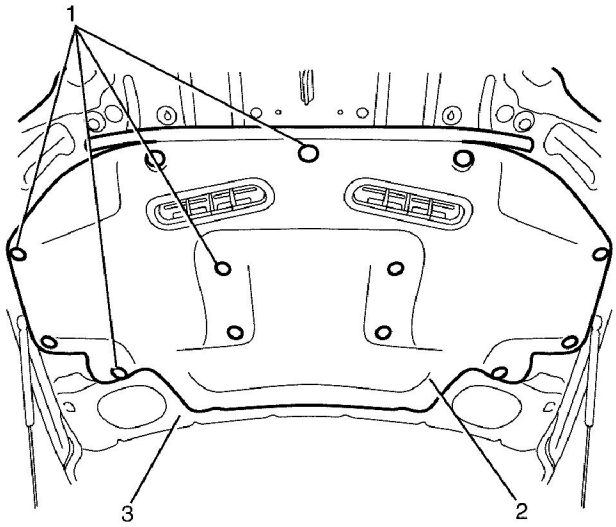
Hood Insulator Replacement

Removal Procedure



Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Open the engine compartment hood and support with a suitable brace.
2. Remove the underside covers of the two hood scoop mouldings (1) from the engine compartment hood (2).



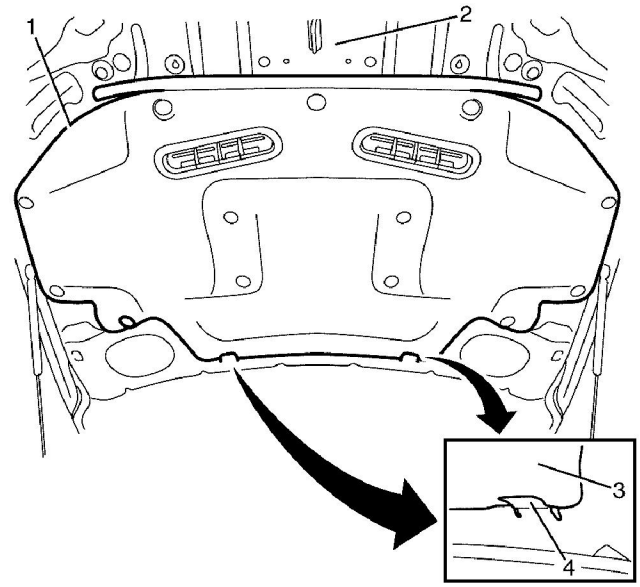
© 2010 General Motors Corporation. All rights reserved.

3. Remove the hood insulator to hood push-in retainers (1).

   Discard the retainers.

4. Remove the hood insulator (2) from the engine compartment hood (3).

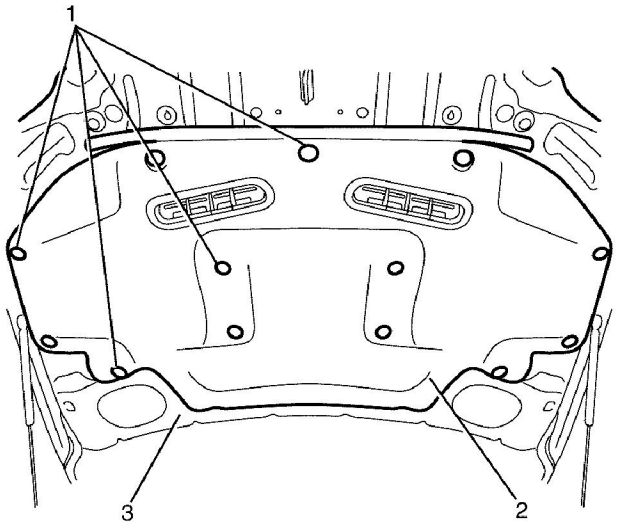
Installation Procedure



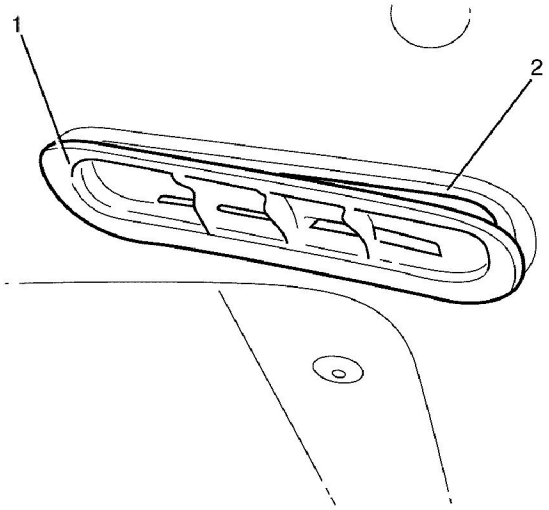
Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

Important: Always use NEW push-in retainers.

1. Install the hood insulator (1) onto the engine compartment hood (2) ensuring the lower edge of the hood insulator (3) is engaged into the retaining tabs (4) on the engine compartment hood (2).



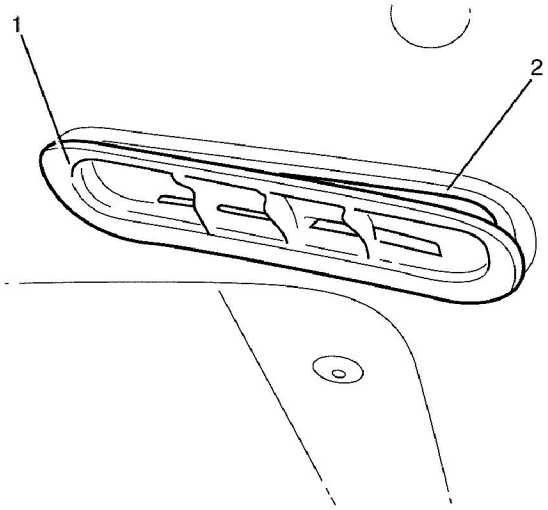
2. Install push-in retainers (1) through the hood insulator (2), engaging into engine compartment hood (3).



3. Install the underside covers of the two hood scoop mouldings (1) onto the engine compartment hood (2).
4. Remove the suitable hood brace from the vehicle and close the engine compartment hood.

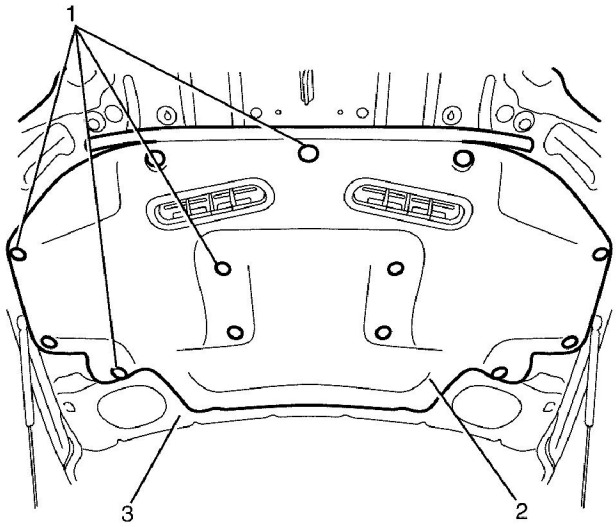
Hood Latch Adjustment

Removal Procedure



Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Open the engine compartment hood and support with a suitable brace.
2. Remove the underside covers of the two hood scoop mouldings (1) from the engine compartment hood (2).



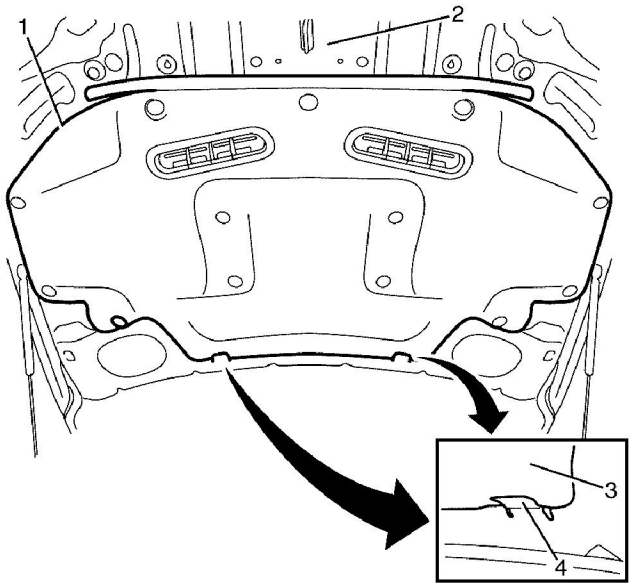
© 2010 General Motors Corporation. All rights reserved.

3. Remove the hood insulator to hood push-in retainers (1).

   Discard the retainers.

4. Remove the hood insulator (2) from the engine compartment hood (3).

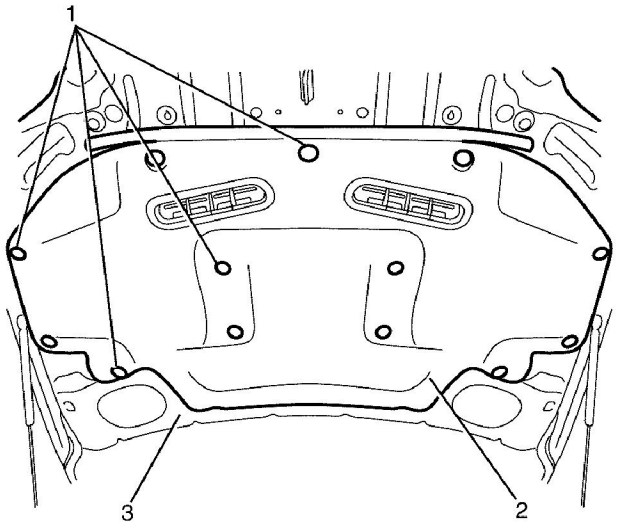
Installation Procedure



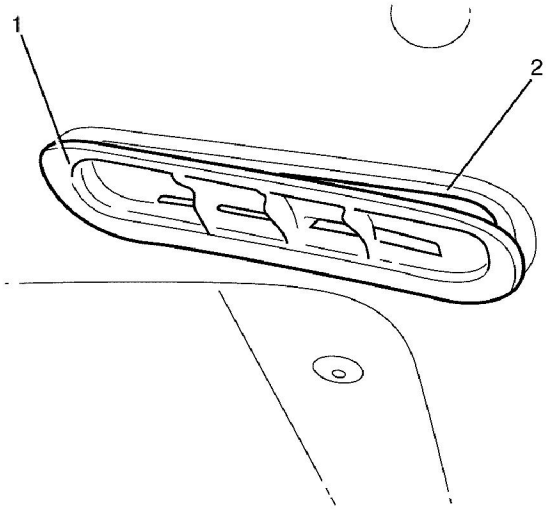
Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

Important: Always use NEW push-in retainers.

1. Install the hood insulator (1) onto the engine compartment hood (2) ensuring the lower edge of the hood insulator (3) is engaged into the retaining tabs (4) on the engine compartment hood (2).



2. Install push-in retainers (1) through the hood insulator (2), engaging into engine compartment hood (3).

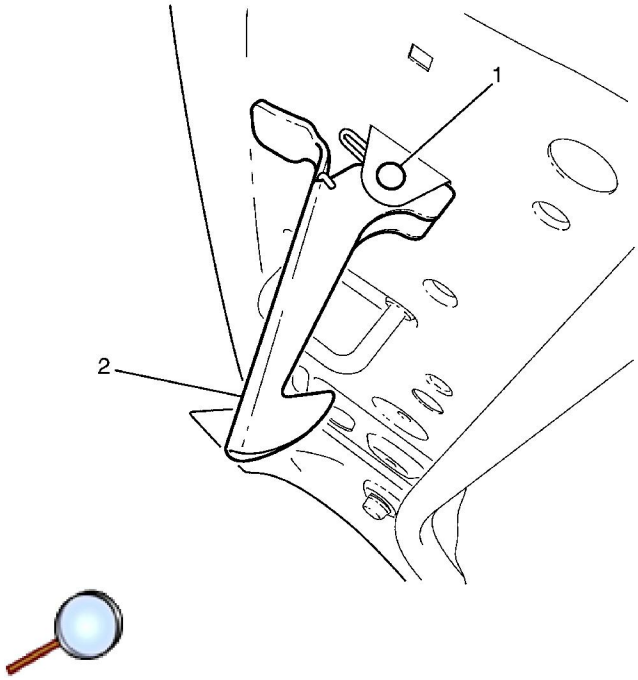


3. Install the underside covers of the two hood scoop mouldings (1) onto the engine compartment hood (2).
4. Remove the suitable hood brace from the vehicle and close the engine compartment hood.

Hood Primary and Secondary Latch Replacement

Removal Procedure

Warning: Refer to Safety Glasses Warning in the Preface section.



Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Install a suitable hood brace to the vehicle.

   Note: The secondary hood latch retaining pin (1) is a single use part only. It must be discarded after removal.

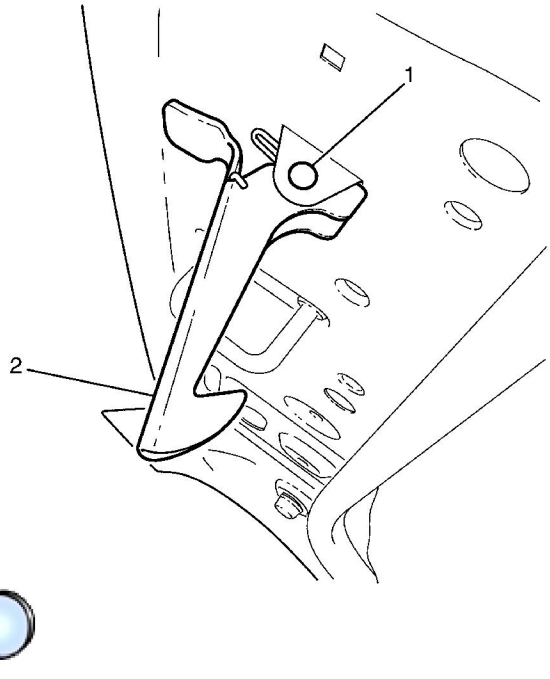
2. Remove the secondary hood latch retaining pin (1) from the secondary hood latch (2).

   Discard the pin.

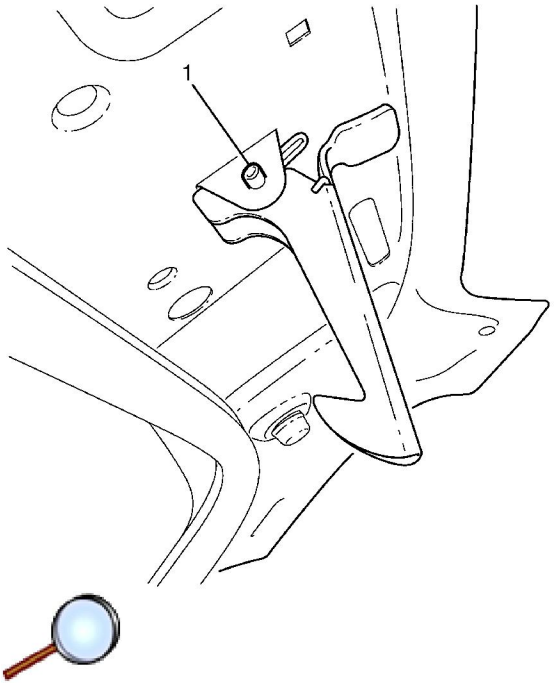
3. Remove the secondary hood latch (2) from the vehicle.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



1. Install the secondary hood latch (2) to the vehicle.
2. Install a NEW secondary hood latch retaining pin (1) to the secondary hood latch.



3. Crimp the exposed end of the secondary hood latch retaining pin (1) capturing the retaining pin in its finished position.

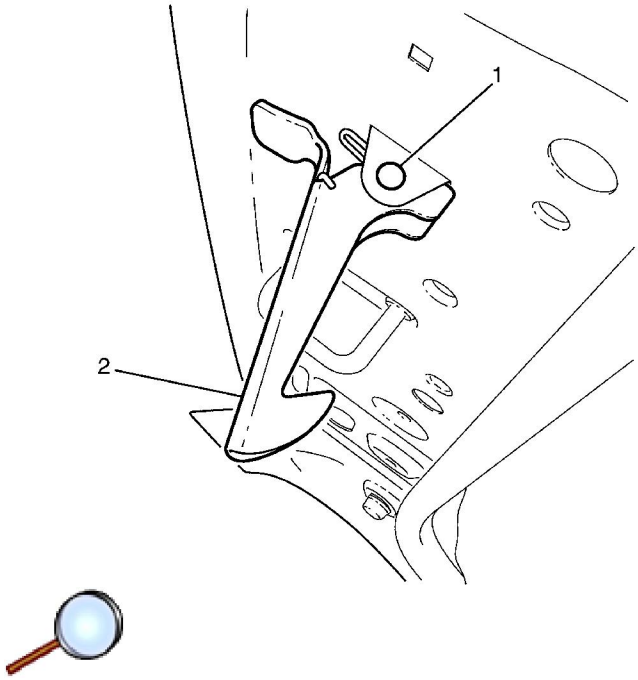
Hood Secondary Latch Replacement

Removal Procedure

Warning: Refer to Protective Goggles and Glove Warning in the Preface section.

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Install a suitable hood brace to the vehicle.



Note: The secondary hood latch retaining pin (1) is a single use part only. It must be discarded after removal.

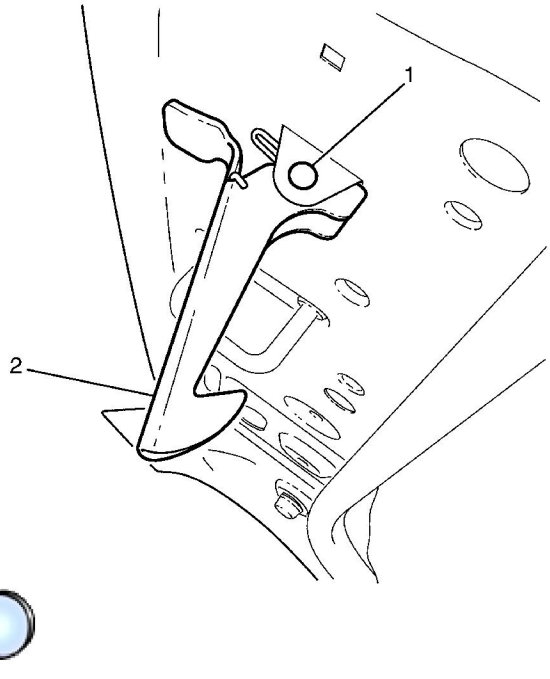
2. Remove the secondary hood latch retaining pin (1) from the secondary hood latch (2).

   Discard the pin.

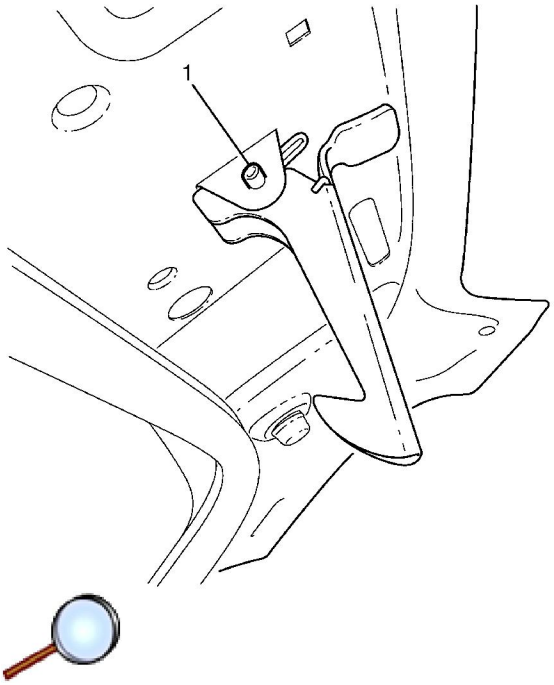
3. Remove the secondary hood latch (2) from the vehicle.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



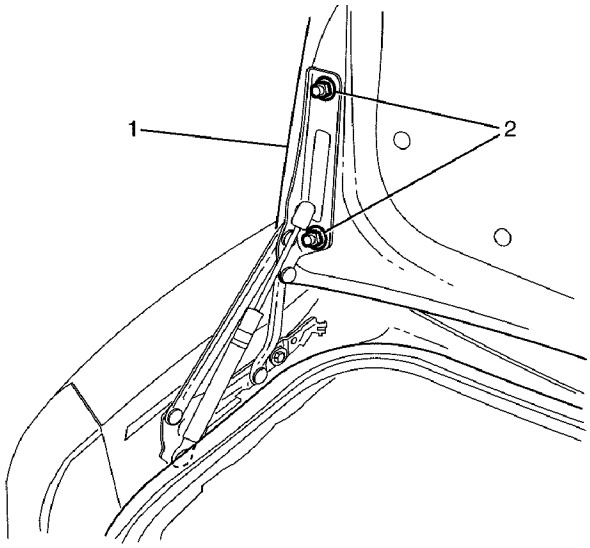
1. Install the secondary hood latch (2) to the vehicle.
2. Install a NEW secondary hood latch retaining pin (1) to the secondary hood latch.



3. Crimp the exposed end of the secondary hood latch retaining pin (1) to make sure the retaining pin is secure.

Rear Compartment Lid Adjustment

Front-to-Rear, Side-to-Side



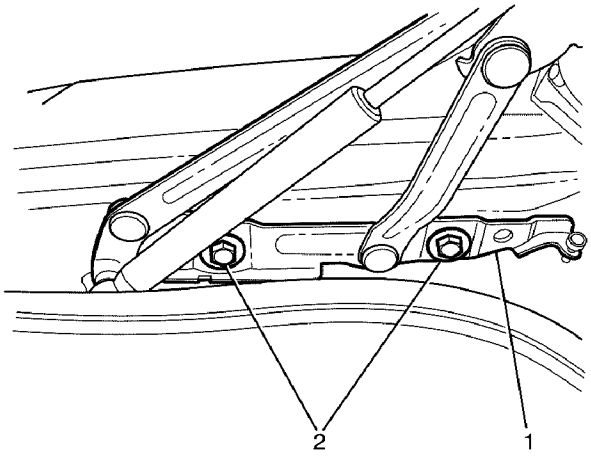
1. Loosen the rear compartment lid to rear compartment lid hinge retaining nuts (2). Repeat for opposite side.
2. Align the rear compartment lid (1) in order to achieve an equal gap of 2.25 to 3.75 mm around the rear compartment lid to the rear quarter panels.

   Caution: Refer to Fastener Caution in the Preface section.

3. Tighten the rear compartment lid to rear compartment lid hinge retaining nuts (2). Repeat for opposite side and tighten to **22 N·m (16 lb ft)**.

Up and Down Adjustment

© 2010 General Motors Corporation. All rights reserved.



1. Loosen the rear compartment lid hinge to rear quarter panel retaining bolts (1). Repeat for opposite side.
2. Align the rear compartment lid in order to achieve an equal gap of 5 to 7 mm from the rear compartment lid to the rear bumper fascia.
3. Tighten the rear compartment lid hinge to rear quarter panel retaining bolts (2). Repeat for opposite side and tighten to **22 N·m (16 lb ft)**.
4. Adjust the rear compartment overslam bumpers for flushness.

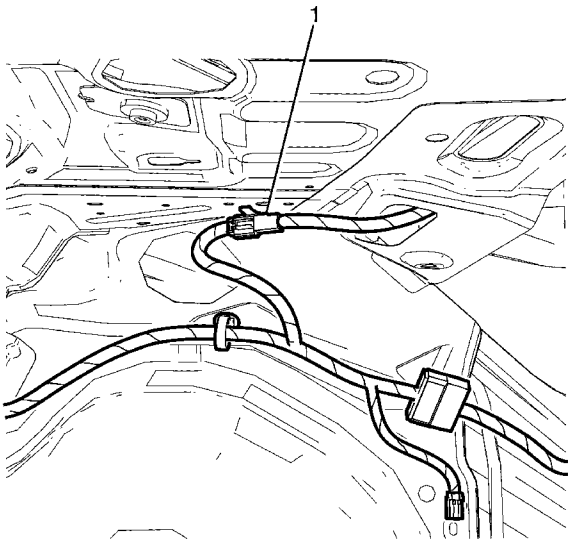
Rear Compartment Lid Replacement

Removal Procedure

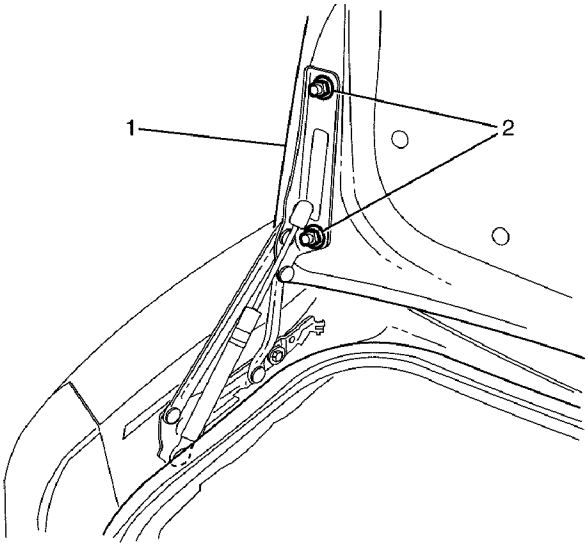
Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

Note: Insert packing foam into the corners of the rear compartment lid to the vehicle body.

1. Support the rear compartment lid with a suitable brace.
2. Remove the rear compartment lid carpet. Refer to Rear Compartment Lid Inner Panel Trim Replacement.

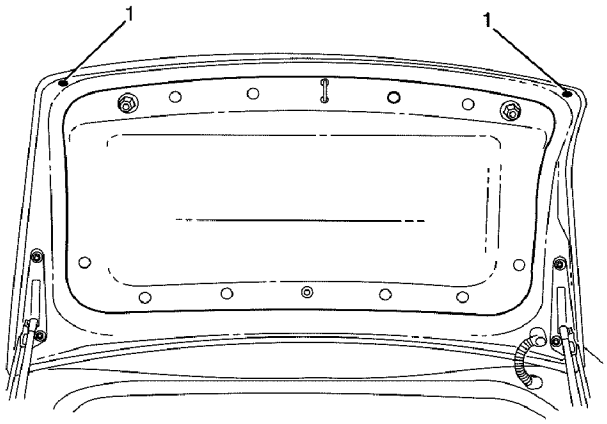


3. Disconnect the rear compartment lid wiring harness (1) from the body wiring harness.

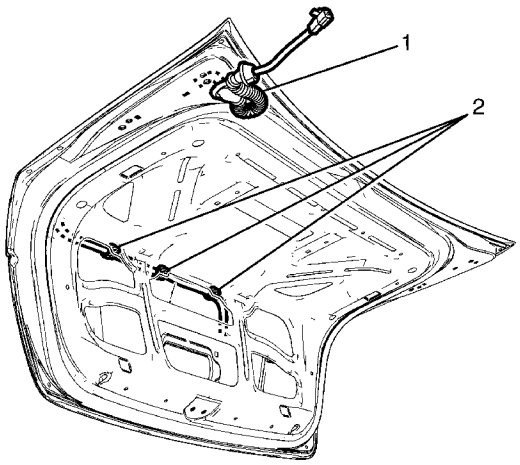


© 2010 General Motors Corporation. All rights reserved.

4. With the aid of an assistant, remove the rear compartment lid to rear compartment lid hinge retaining nuts (2). Repeat for opposite side.
5. Remove the rear compartment lid (1) from the vehicle.
6. Remove the rear compartment lid latch. Refer to Rear Compartment Lid Latch Replacement.
7. Remove the rear compartment lid overslam bumpers from the rear compartment lid. Refer to Rear Compartment Lid Overslam Bumper Replacement.



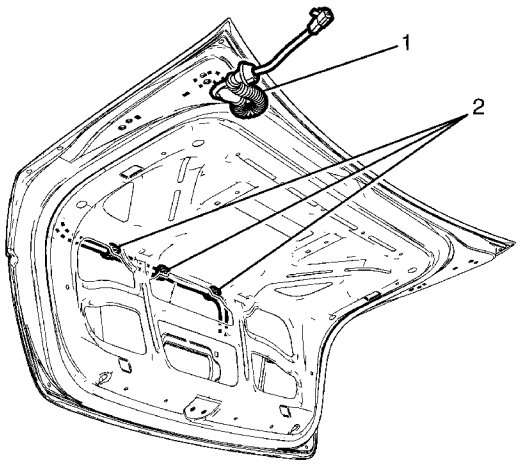
8. Remove the rear compartment lid drain plugs (1) from the rear compartment lid.



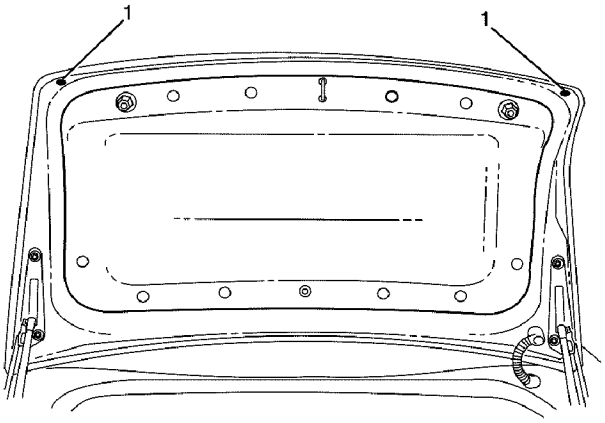
9. Remove the rear compartment lid wiring harness to rear compartment lid retaining clips (2).
10. Remove the rear compartment lid wiring harness insulator (1) from rear compartment lid.
11. Remove the rear compartment lid wiring harness from the rear compartment lid.

Installation Procedure

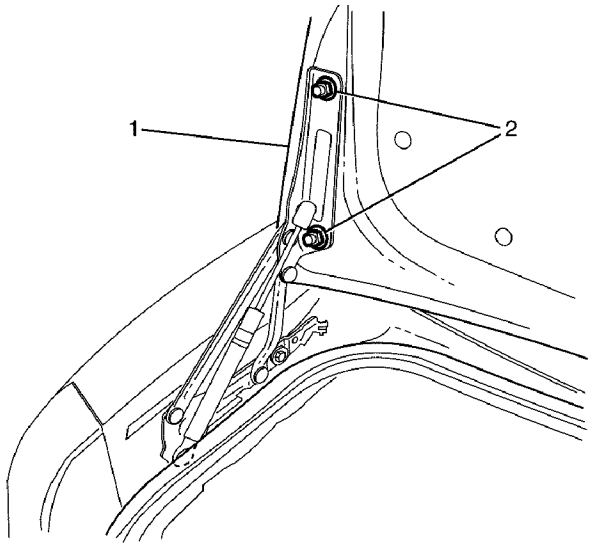
1. Install the rear compartment lid wiring harness to the rear compartment lid.



2. Install the rear compartment lid wiring harness insulator (1) to the rear compartment lid.
3. Install the rear compartment lid wiring harness to rear compartment lid retaining clips (2).



4. Install the rear compartment lid drain plugs (1) to the rear compartment lid.
5. Install the rear compartment lid overslam bumpers to the rear compartment lid. Refer to Rear Compartment Lid Overslam Bumper Replacement.
6. Install the rear compartment lid latch. Refer to Rear Compartment Lid Latch Replacement.



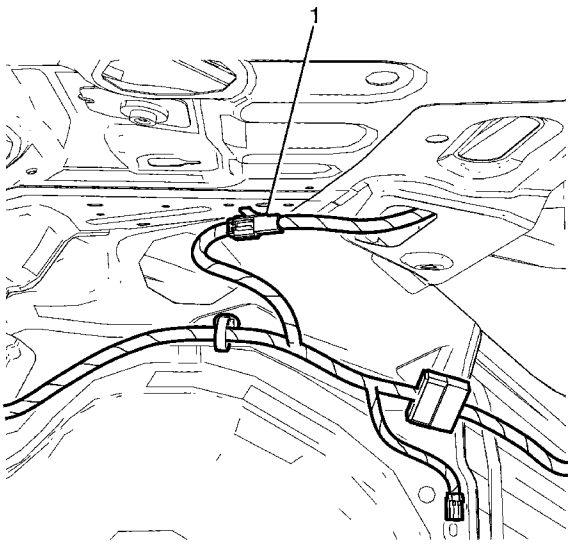
7. With the aid of an assistant, install the rear compartment lid (1) to the vehicle.
8. Support the rear compartment lid with a suitable brace.

Caution: Refer to Fastener Caution in the Preface section.

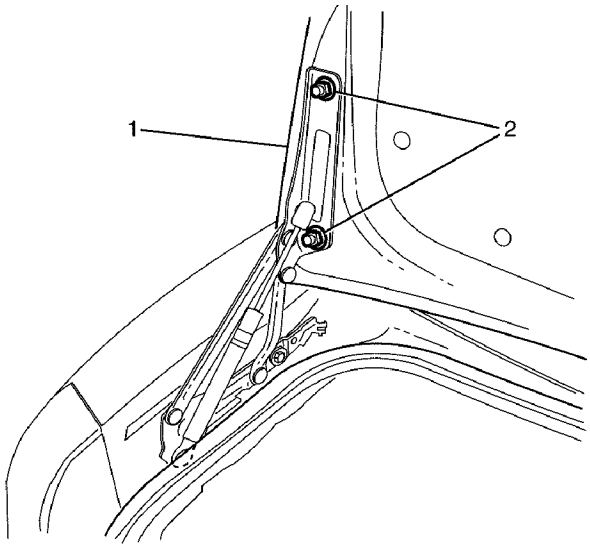
Note: Do not fully tighten the rear compartment lid retaining nuts (2) at this stage.

9. Install the rear compartment lid to rear compartment lid hinge retaining nuts (2). Repeat for opposite side.

   Do not fully tighten at this stage.



10. Connect the rear compartment lid wiring harness (1) to the body wiring harness.
11. Refer to Rear Compartment Lid Inner Panel Trim Replacement.
12. Remove the suitable brace from the vehicle.
13. Adjust the rear compartment lid as necessary. Refer to Rear Compartment Lid Adjustment.

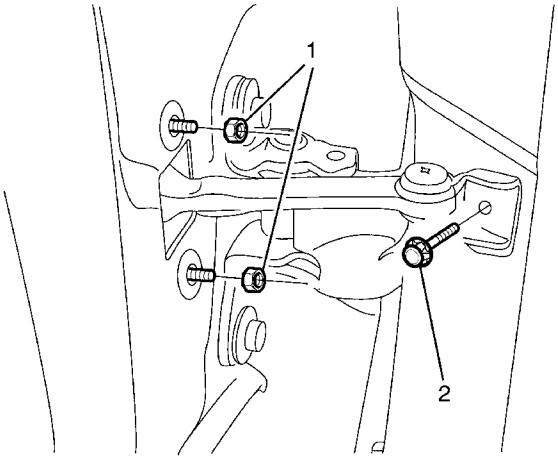


14. Tighten the rear compartment lid to rear compartment lid hinge retaining nuts (1) to **22 N·m (16 lb ft)**. Repeat for opposite side.

Front Side Door Check Link Replacement

Removal Procedure

1. Remove the door trim panel. Refer to Front Side Door Trim Panel Replacement.
2. Pull back the forward half of the water deflector from the door panel to access the check link.



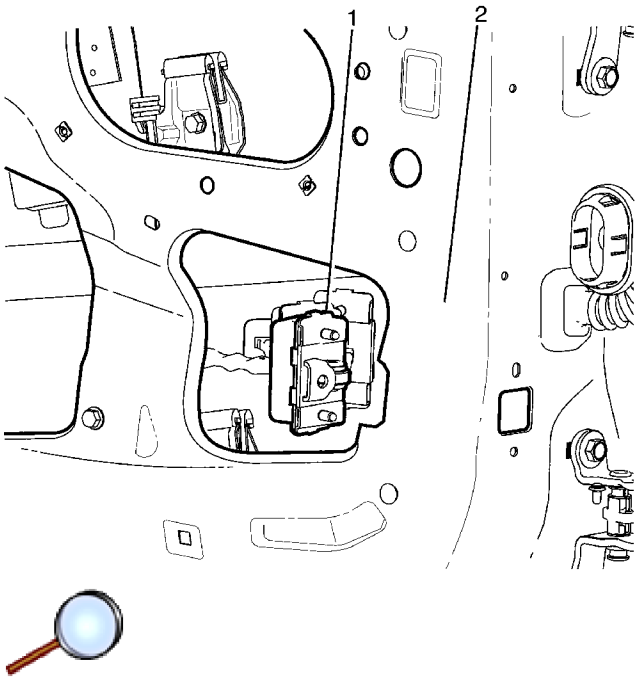
Note: The door check link to pillar retaining bolt (2) is a single use part and must be discarded after removal.

3. Remove the door check link to pillar retaining bolt (2).

   Discard the bolt.

4. Remove the door check link to door retaining nuts (1).

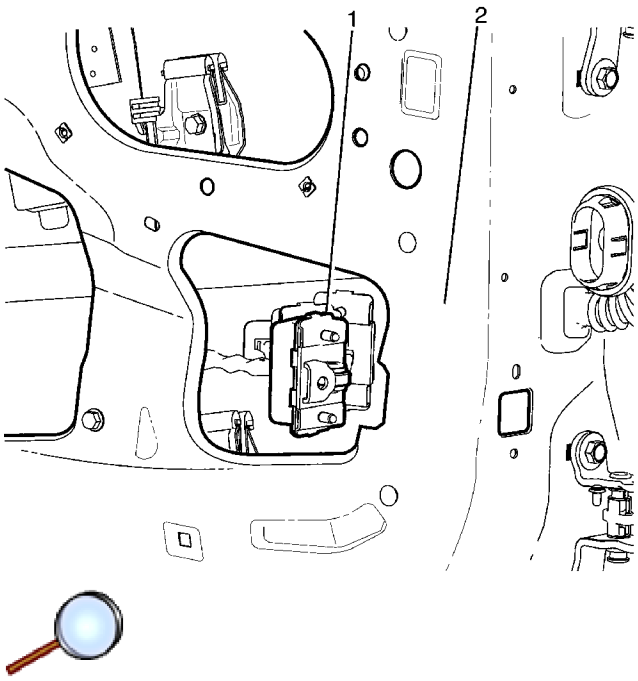
© 2010 General Motors Corporation. All rights reserved.



Note: Remove the check link (1) through the front lower access hole.

5. Remove the door check link (1) from the door (2).

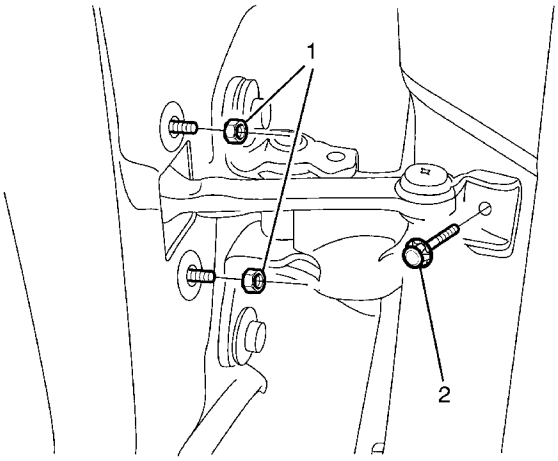
Installation Procedure



Note: Install the check link (1) through the front lower access hole.

1. Install the door check link (1) to the door (2).

Caution: Refer to Fastener Caution in the Preface section.



2. Install the NEW door check link to pillar retaining bolt (1) and tighten to **25 N·m (18 lb in)**.
3. Install the door check link to door retaining nuts (1) and tighten to **6 N·m (53 lb in)**.

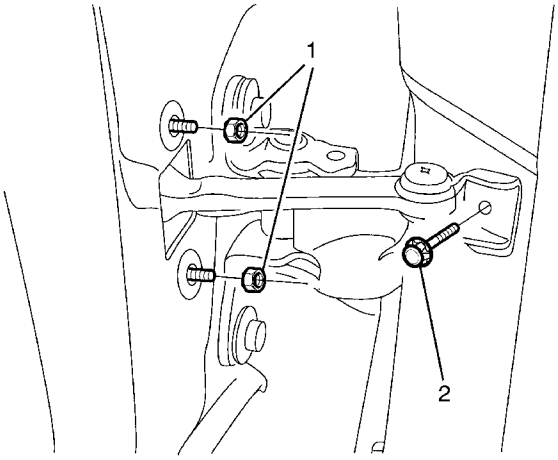
Note: Firmly press the water deflector where adhesive is applied to make sure of a water tight bond.

4. Install the water deflector to the door.
5. Install the door trim panel. Refer to Front Side Door Trim Panel Replacement.

Rear Side Door Check Link Replacement

Removal Procedure

1. Remove the door trim panel. Refer to Rear Side Door Trim Panel Replacement.
2. Pull the forward half of the water deflector away from the door panel in order to access the check link.



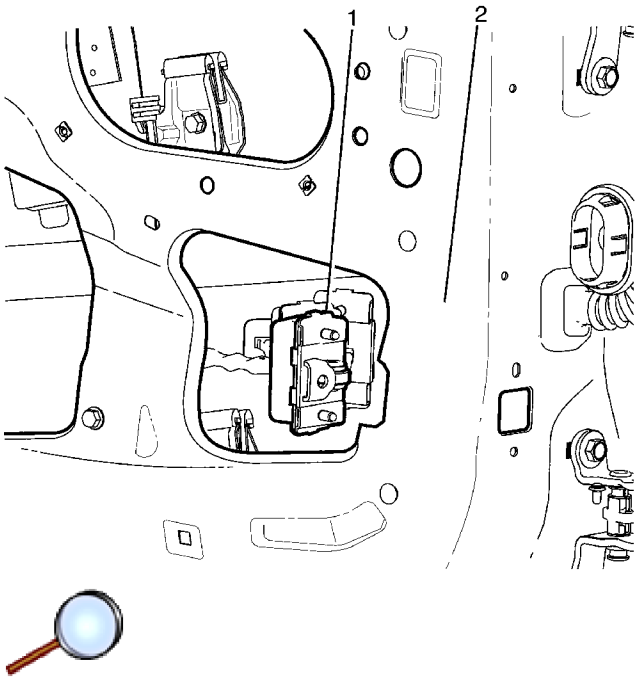
Note: The door check link to pillar retaining bolt (2) is a single use part and must be discarded after removal.

3. Remove the door check link to pillar retaining bolt (2).

   Discard the bolt.

4. Remove the door check link to door retaining nuts (1).

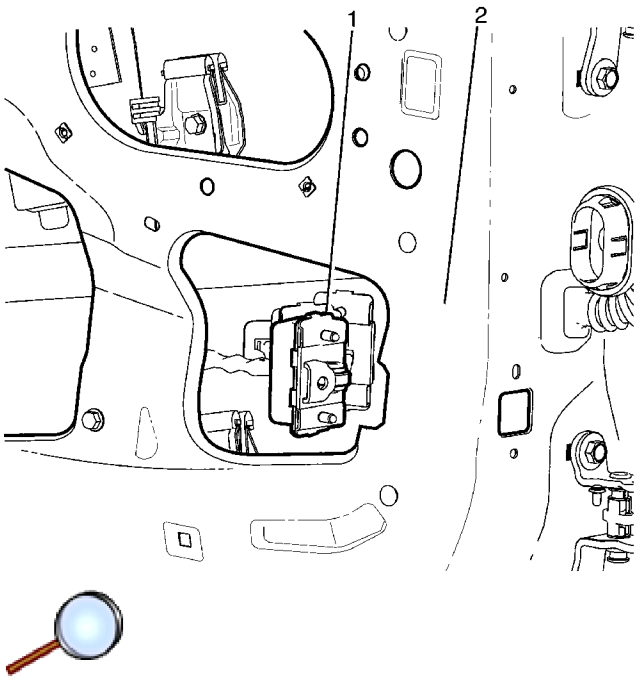
© 2010 General Motors Corporation. All rights reserved.



Note: Remove the check link through the front lower access hole.

5. Remove the door check link (1) from the door (2).

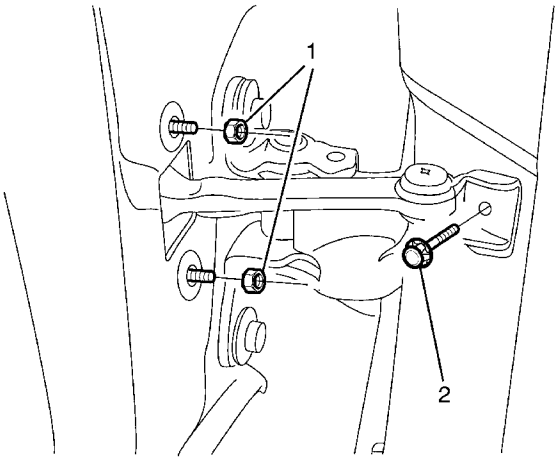
Installation Procedure



Note: Install the check link through the front lower access hole.

1. Install the door check link (1) into the door (2).

Caution: Refer to Fastener Caution in the Preface section.



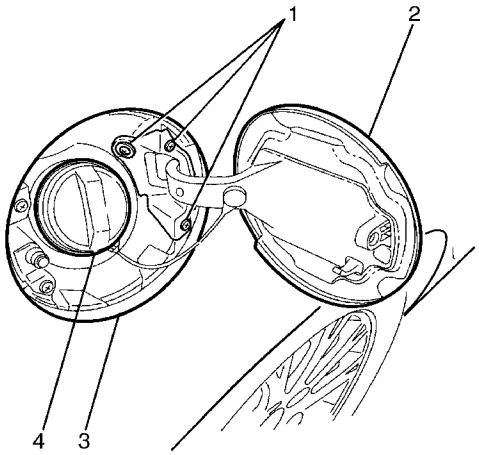
2. Install the NEW door check link to pillar retaining bolt (2) and tighten to **25 N·m (18 lb in)**.
3. Install the door check link to door retaining nuts (1) and tighten to **6 N·m (53 lb in)**.

Note: Firmly press the water deflector where adhesive is applied to make sure of a water tight bond.

4. Install the water deflector to the door.
5. Install the door trim panel. Refer to Rear Side Door Trim Panel Replacement.

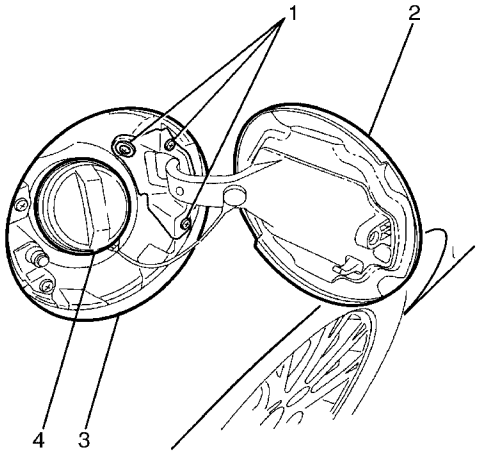
Fuel Tank Filler Door Replacement

Removal Procedure



1. Remove the fuel cap (4).
2. Remove the fuel tank filler door to rear quarter panel retaining TORX screws (1).
3. Remove the fuel tank filler door (2) from the rear quarter panel (3).

Installation Procedure



© 2010 General Motors Corporation. All rights reserved.

1. Position the fuel tank filler door (2) to the rear quarter panel (3).
2. Install the fuel tank filler door to rear quarter panel retaining TORX screws (1).
3. Align the fuel tank filler door to achieve an equal gap of 1.5 to 2.5 mm (0.06 to 0.10 in) around the fuel tank filler door (2) to the rear quarter panel (3).

   Caution: Refer to Fastener Caution in the Preface section.

4. Tighten the fuel tank filler door to rear quarter panel retaining TORX screws (1) and tighten to **2 N·m (18 lb in)**.
5. Install the fuel cap (4).

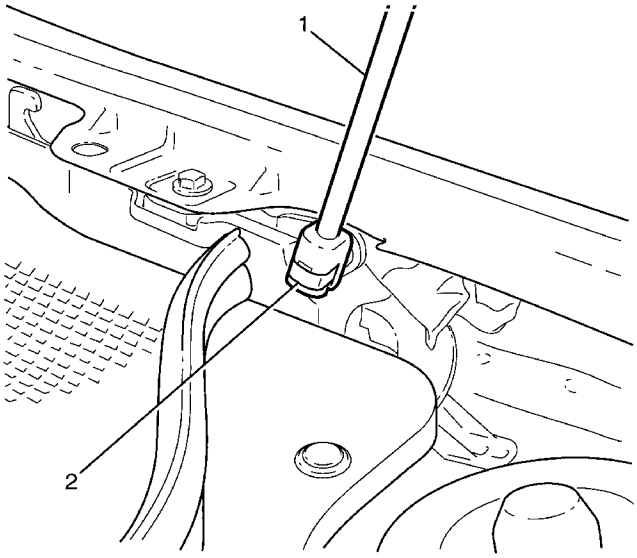
Hood Open Assist Rod Replacement

Removal Procedure

Caution: Apply pressure only at the end of the liftgate/hood assist rod that you are removing or attaching. Do NOT apply pressure to the middle of the rod because damage or bending will result.

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

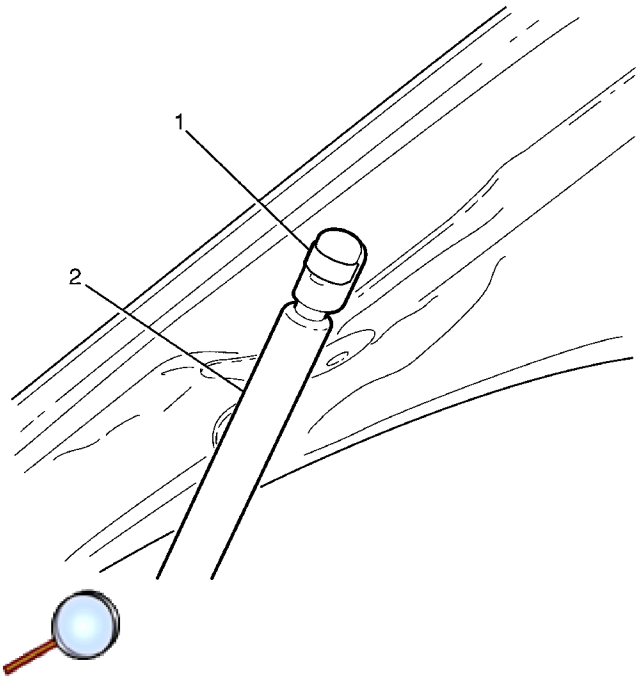
1. Install a suitable hood brace to the vehicle.



Note: Do not fully remove the hood assist rod securing clips from the hood assist rod, as this will assist in the installation.

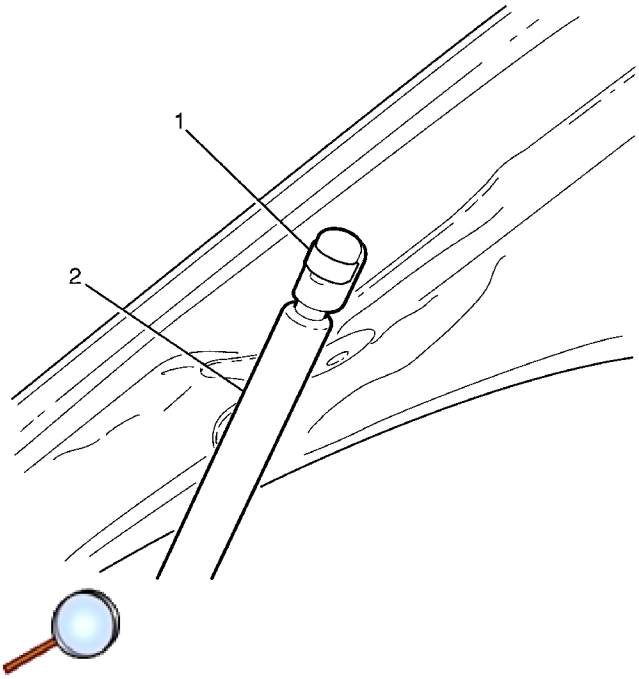
2. Using a suitable tool, release the securing clip (2) retaining the hood assist rod (1) to the hood assist rod lower ball stud.

© 2010 General Motors Corporation. All rights reserved.

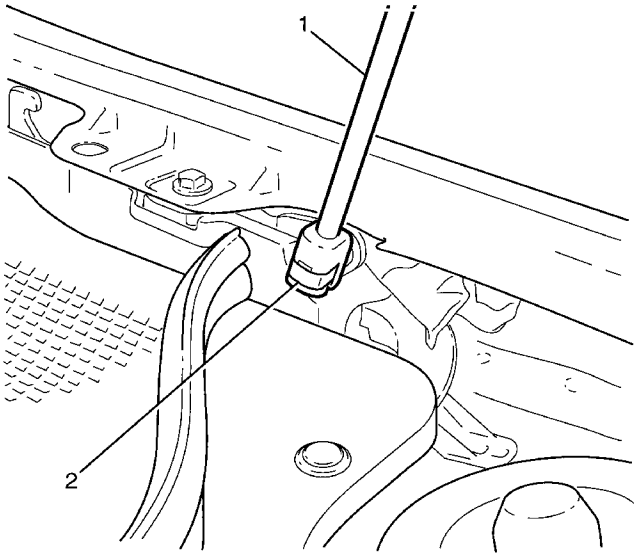


3. Using a suitable tool, release the securing clip (1) retaining the hood assist rod (2) to the hood assist rod upper ball stud.
4. Remove the hood assist rod (2) from the vehicle.

Installation Procedure



1. Press the hood assist rod (2) onto the hood assist rod upper ball stud. Listen for an audible click to confirm fitting.
2. Make sure that the hood assist rod securing clip (1) is fully seated on the hood assist rod (2).



3. Press the hood assist rod (1) onto the hood assist rod lower ball stud. Listen for an audible click to confirm fitting.
4. Make sure that the hood assist rod securing clip (2) is fully seated on the hood assist rod (1).

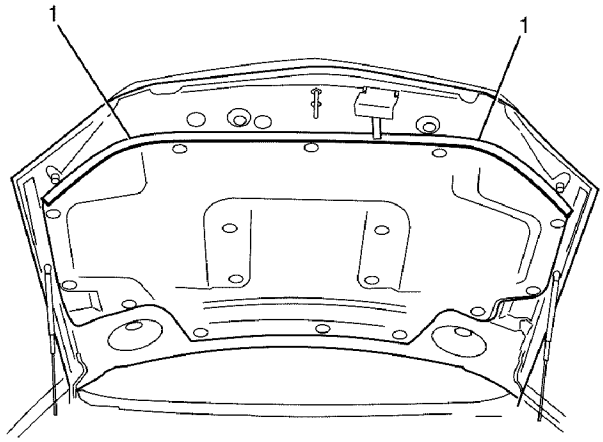
Hood Front Seal Replacement

Removal Procedure

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Install a suitable hood brace to the vehicle.

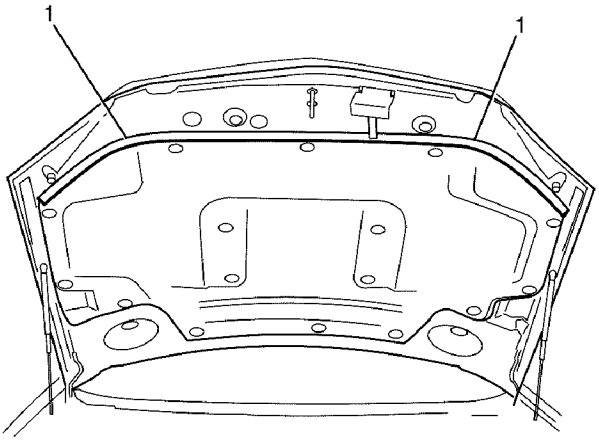
Warning: Refer to Safety Glasses Warning in the Preface section.



2. Using a suitable tool, carefully work the hood front seal (1) off the hood from side to side.
3. Remove the hood front seal (1) from the hood.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



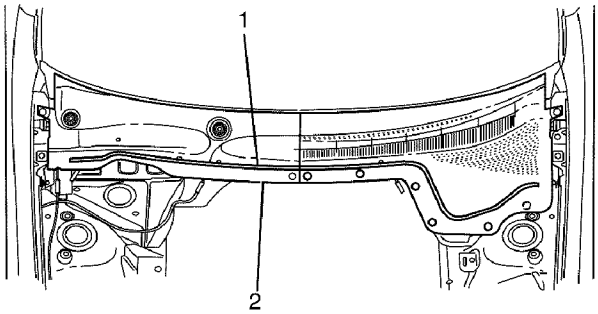
1. Position the hood front seal (1) to the hood.
2. Install the push-in retainers to secure the hood front seal (1) to the hood.
3. Remove the suitable hood brace from the vehicle.

Hood Rear Seal Replacement

Removal Procedure

Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

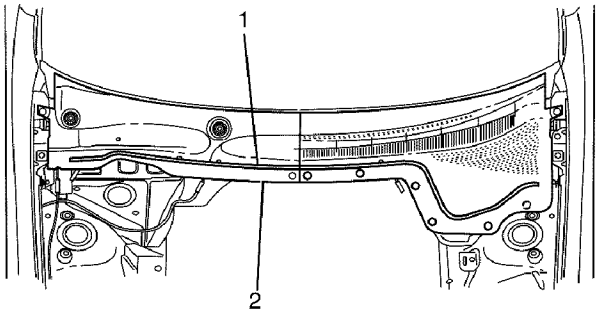
1. Install a suitable hood brace to the vehicle.



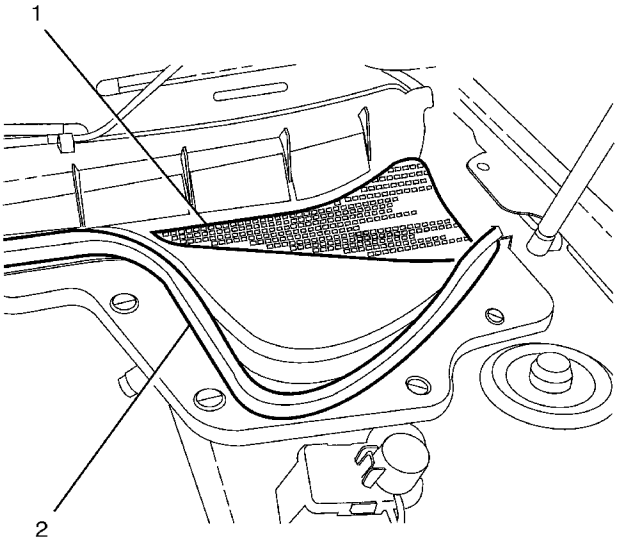
2. Remove the hood rear seal (1) from the air inlet grille panel (2) lip.

Installation Procedure

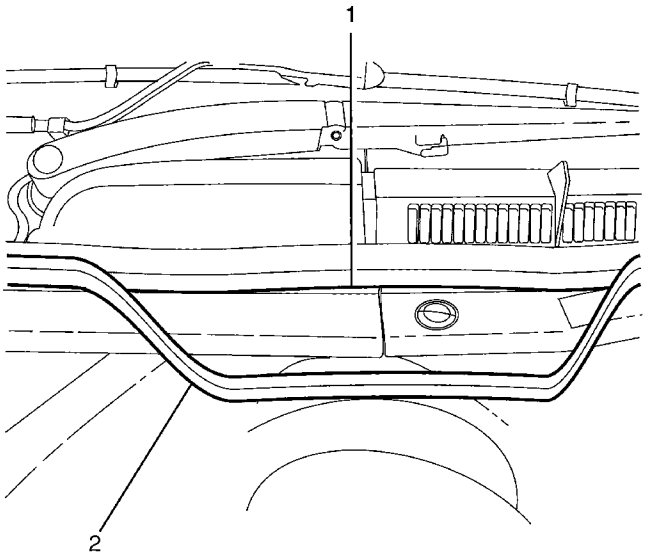
© 2010 General Motors Corporation. All rights reserved.



1. Install the hood rear seal (1) to the air inlet grille panel (2) lip.



2. Install the ends of the hood rear seal (2) to the ends of the air inlet grille panel (1).

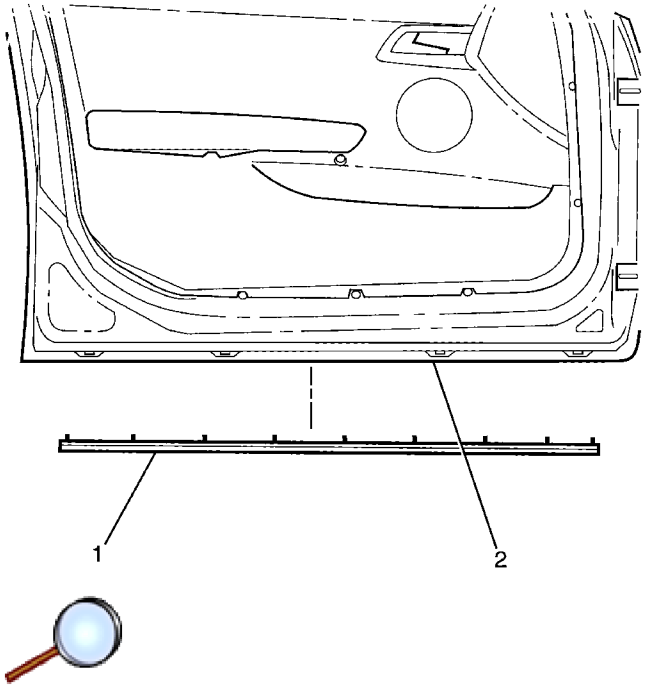


Important: The rear hood seal will stretch to fit the length across the air inlet grille panel.

3. Install the remaining portion of the hood rear seal (2) to the air inlet grille panel, working from the outer edges to the centre of the vehicle.
4. Remove the suitable hood brace from the vehicle.

Front Side Door Bottom Auxiliary Sealing Strip Replacement

Removal Procedure

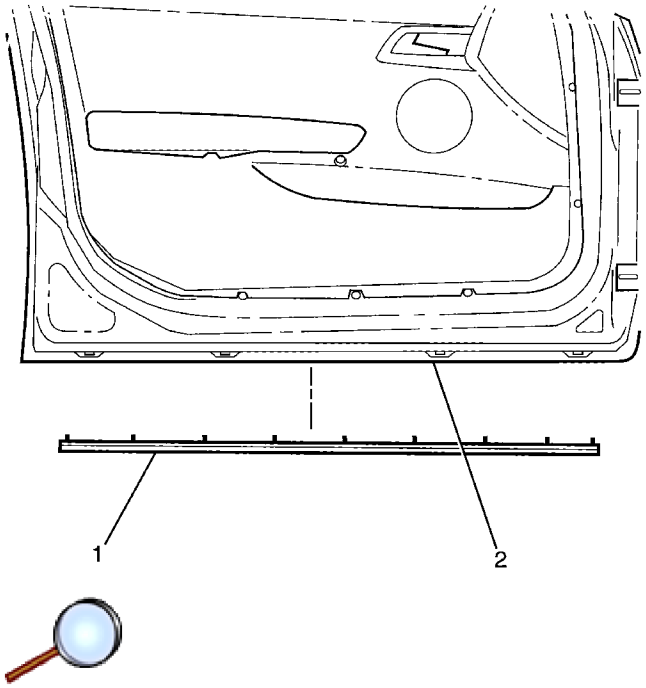


Important: Pull the front door bottom auxiliary sealing strip (1) from the door (2) to detach the retainers.

Remove the front door bottom auxiliary sealing strip (1) from the door (2).

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.

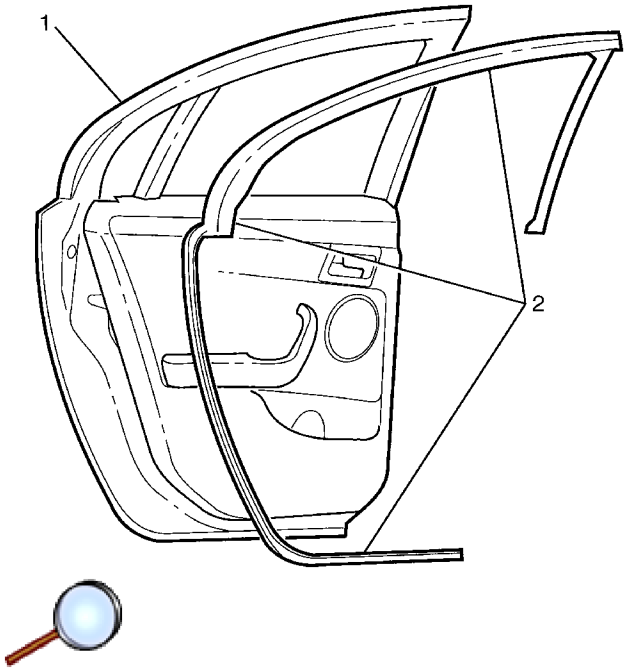


Important: Push the bottom auxiliary sealing strip (1) to the door (2) by hand to attach the retainers.

Install the front door bottom auxiliary sealing strip (1) to the door (2).

Rear Side Door Bottom Auxiliary Sealing Strip Replacement

Removal Procedure

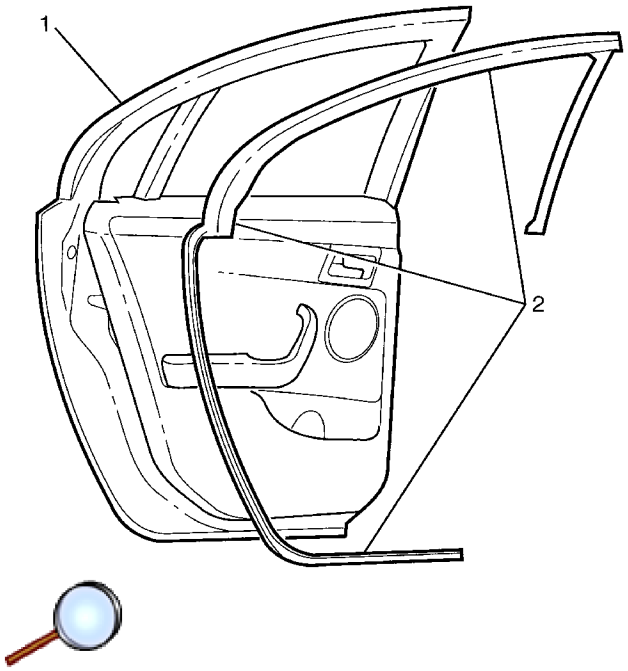


Important: Pull the sealing strip (2) from the door (1) to detach the retainers.

Remove the sealing strip (2) from the door (1).

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



Important: Push the sealing strip (2) to the door (1) to attach the retainers.

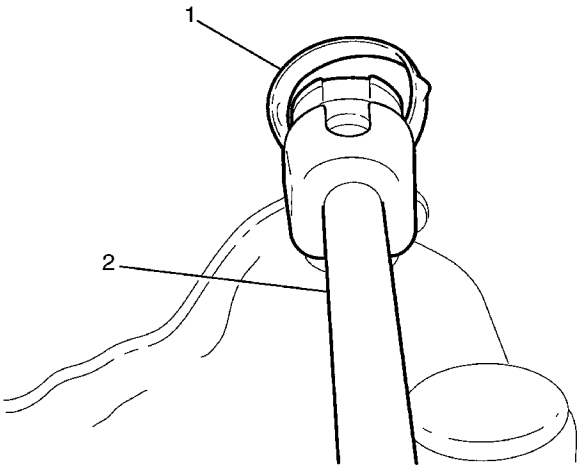
Install the sealing strip (2) to the door (1).

Rear Compartment Lid Strut Replacement

Removal Procedure

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

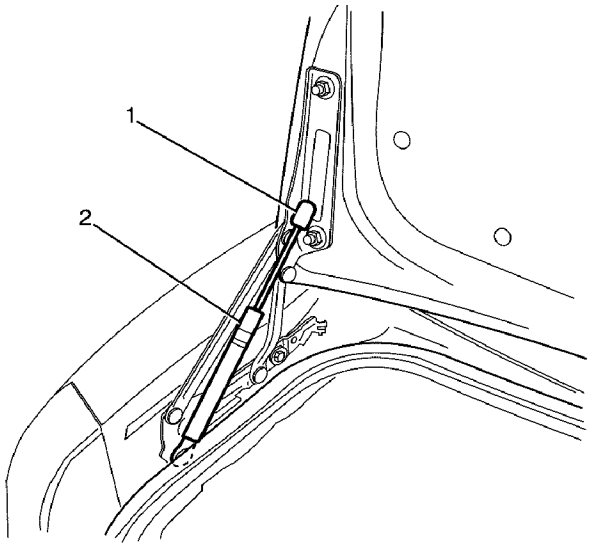
1. Support the rear compartment lid with a suitable brace.



Caution: Apply pressure only at the end of the liftgate/hood assist rod that you are removing or attaching. Do NOT apply pressure to the middle of the rod because damage or bending will result.

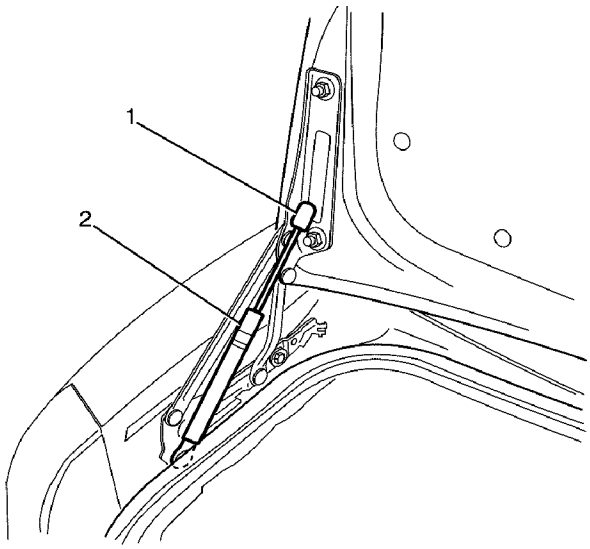
2. Using a suitable tool, release the rear compartment lid strut to the lower strut stud retaining clip (1).

© 2010 General Motors Corporation. All rights reserved.

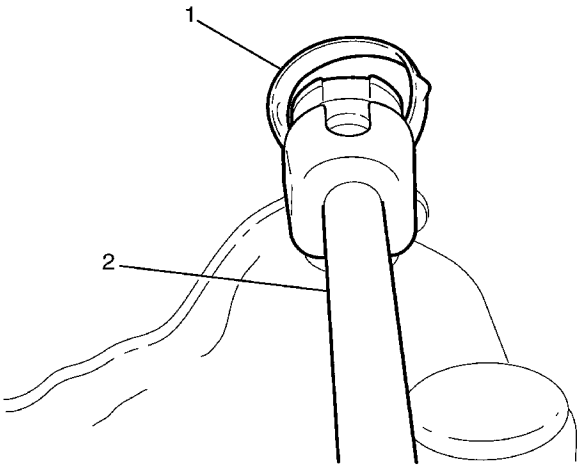


3. Using a suitable tool, release the rear compartment lid strut to the upper strut stud retaining clip (1).
4. Remove the rear compartment lid strut (2) from the vehicle.

Installation Procedure



1. Press the rear compartment lid strut (2) onto the upper strut stud.
2. Install the rear compartment lid strut stud retaining clip (1) to the rear compartment lid strut.



Caution: Apply pressure only at the end of the liftgate/hood assist rod that you are removing or attaching. Do NOT apply pressure to the middle of the rod because damage or bending will result.

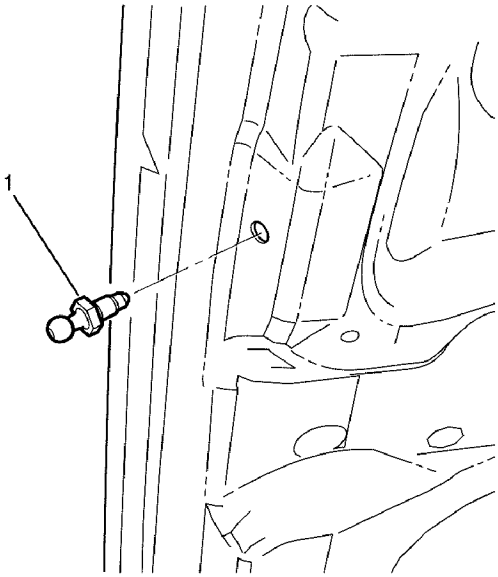
3. Press the rear compartment lid strut (2) onto the lower strut stud.
4. Install the rear compartment lid strut stud retaining clip (1) to the rear compartment lid strut.
5. Make sure that both clips are fully seated on the rear compartment lid strut.
6. Remove the suitable brace from the vehicle.

Hood Open Assist Rod Stud Replacement

Removal Procedure

Note: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

1. Install a suitable hood brace to the vehicle.
2. Remove the hood assist rod. Refer to Hood Open Assist Rod Replacement.

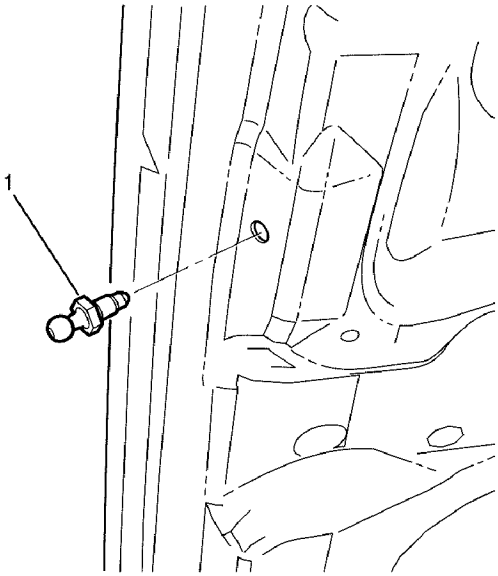


3. Remove the hood assist rod upper ball stud (1) from the hood.

Installation Procedure

Caution: Refer to Fastener Caution in the Preface section.

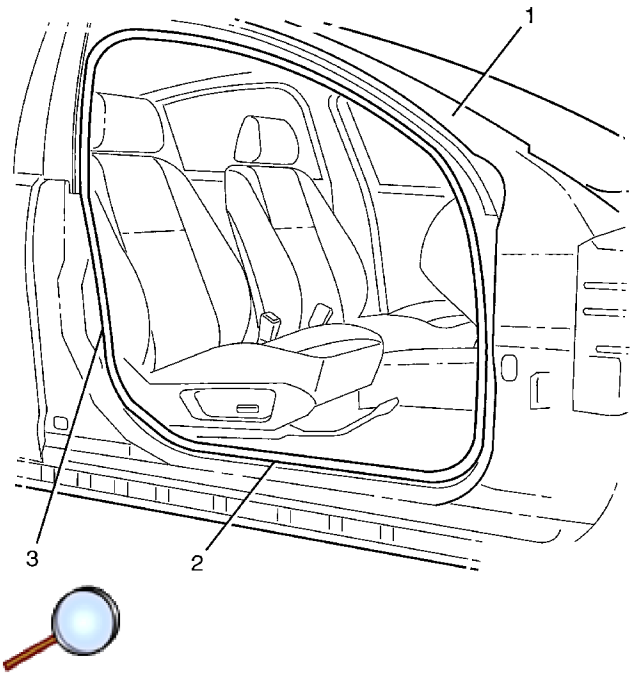
© 2010 General Motors Corporation. All rights reserved.



1. Install the hood assist rod upper ball stud (1) to the hood and tighten to **18 N·m (15 lb ft)**.
2. Install the hood assist rod. Refer to Hood Open Assist Rod Replacement.
3. Remove the suitable hood brace from the vehicle.

Front Door Opening Weatherstrip Replacement

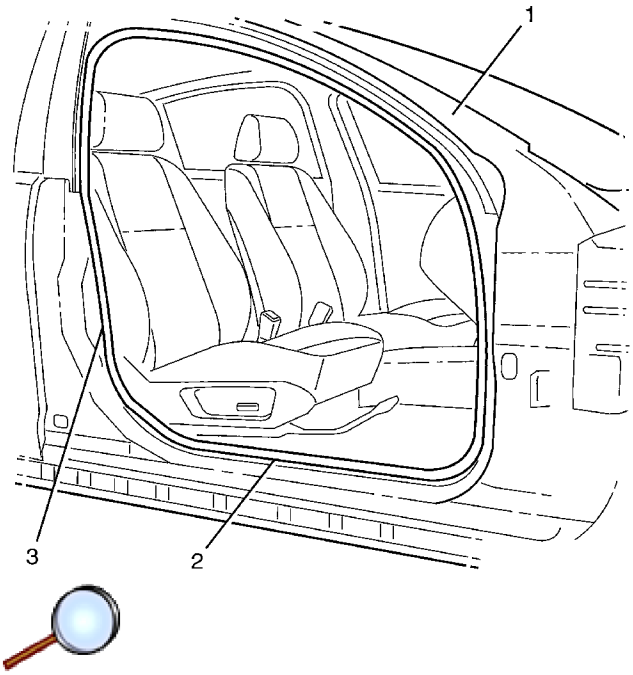
Removal Procedure



1. Open the relevant front door of the vehicle.
2. Remove the front side door sill plate. Refer to Front Side Door Sill Plate Replacement .
3. Starting from the centre sill point (2) carefully remove the front door weatherstrip (3) from the body panel door opening (1).

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.

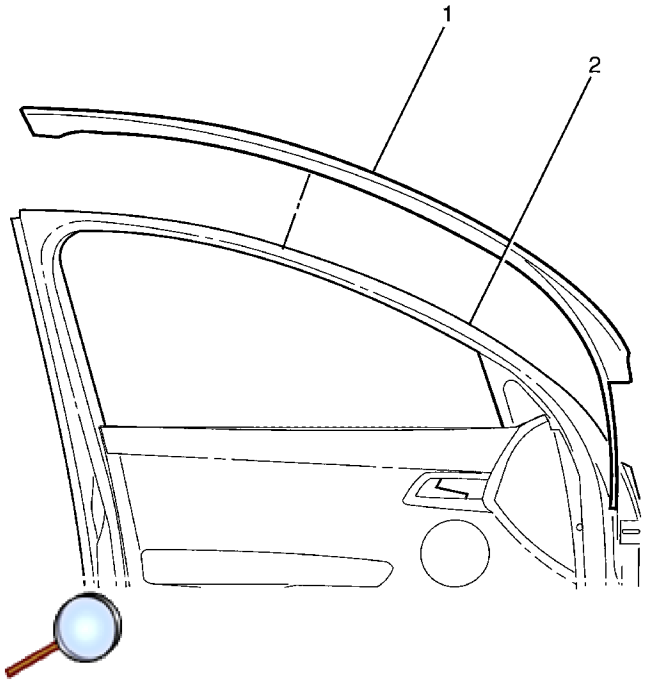


1. Starting from the centre sill point (2) carefully install the front door weatherstrip (3) onto the body panel seam in the door opening (1).
2. Install the front side door sill plate. Refer to Front Side Door Sill Plate Replacement .
3. Close the relevant front door of the vehicle.

Front Side Door Upper Auxiliary Weatherstrip Replacement

Removal Procedure

1. Remove the push-in front door upper auxiliary weatherstrip to door retaining fasteners.

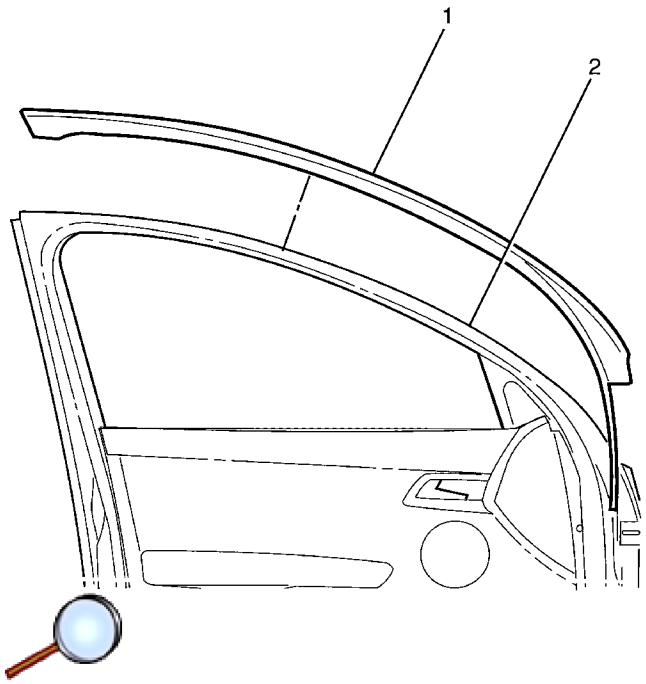


Important: Remove the weatherstrip by pulling to release retaining fasteners.

2. Remove the front door upper auxiliary weatherstrip (1) from the door (2).

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



Important: Install the weatherstrip by pushing to attach retaining fasteners.

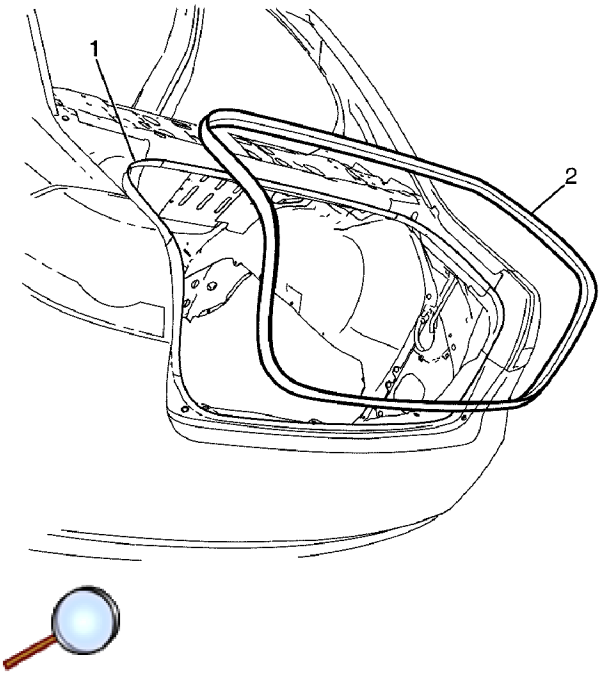
1. Install the front door upper auxiliary weatherstrip moulding (1) to the door (2).
2. Install the push-in fasteners to the door.

Rear Compartment Lid Weatherstrip Replacement

Removal Procedure

Important: When a suitable hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

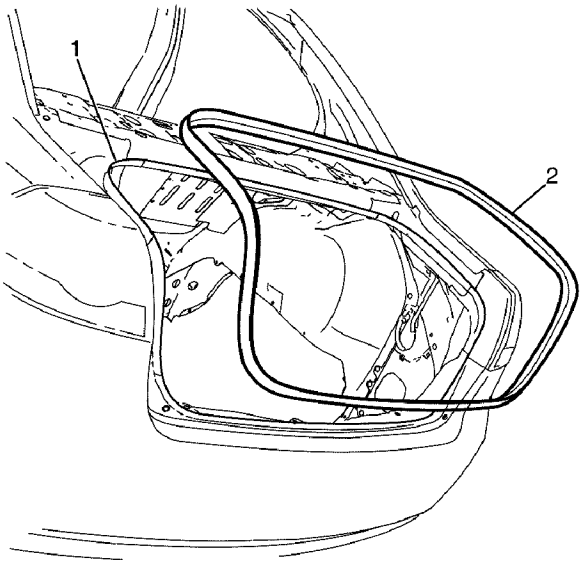
1. Support the rear compartment lid with a suitable brace.



2. Pull the rear compartment weatherstrip (2) from the rear compartment pinch-weld flange (1) on the body.
3. Remove the rear compartment weatherstrip (2) from the vehicle.

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.



1. Position the rear compartment weatherstrip (2) over the top of the rear compartment pinch-weld flange (1).
2. Press the rear compartment weatherstrip (2) down onto the rear compartment pinch-weld flange (1).
3. Make sure that the rear compartment weatherstrip (2) is secured properly to the entire pinch-weld flange (1).
4. Remove the suitable brace from the vehicle.

Select a Document:

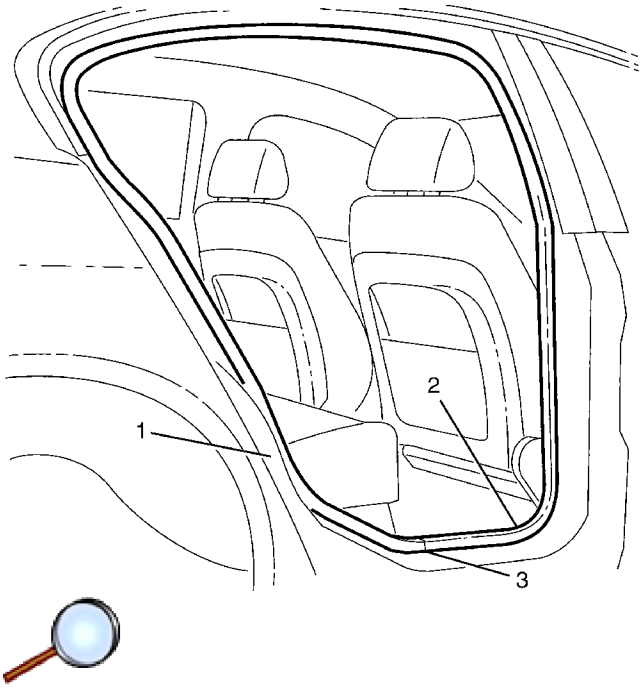
- Front End Panel Module Carrier Assembly Replacement
- Hood Bumper Replacement
- Rear Compartment Lid Overslam Bumper Replacement
- Hood Primary Latch Release Cable Replacement
- Front and Rear Side Door Window Garnish Molding Replacement (Front)
- Front and Rear Side Door Window Garnish Molding Replacement (Rear)
- Door Adjustment
- Front Side Door Replacement
- Rear Door Replacement
- Front Fender Replacement
- Front Side Door Wiring Harness Replacement
- Rear Side Door Wiring Harness Replacement
- Front Side Door Upper Hinge and Lower Hinge Replacement
- Hood Hinge Replacement
- Rear Compartment Lid Hinge Replacement
- Rear Side Door Upper Hinge and Lower Hinge Replacement
- Hood Adjustment
- Hood Replacement
- Front Fender Insulator Replacement
- Hood Insulator Replacement
- Hood Latch Adjustment
- Hood Primary and Secondary Latch Replacement
- Hood Primary Latch Striker Replacement
- Hood Secondary Latch Replacement
- Rear Compartment Lid Adjustment
- Rear Compartment Lid Replacement
- Front Side Door Check Link Replacement
- Rear Side Door Check Link Replacement
- Fuel Tank Filler Door Replacement
- Hood Open Assist Rod Replacement
- Hood Front Seal Replacement
- Hood Rear Seal Replacement
- Front Side Door Bottom Auxiliary Sealing Strip Replacement
- Rear Side Door Bottom Auxiliary Sealing Strip Replacement
- Rear Compartment Lid Strut Replacement
- Hood Open Assist Rod Stud Replacement
- Front Door Opening Weatherstrip Replacement

© 2010 General Motors Corporation. All rights reserved.

- Front Side Door Upper Auxiliary Weatherstrip Replacement
- Rear Compartment Lid Weatherstrip Replacement
- Rear Door Opening Weatherstrip Replacement
- Rear Side Door Window Frame Rear Applique Replacement

Rear Door Opening Weatherstrip Replacement

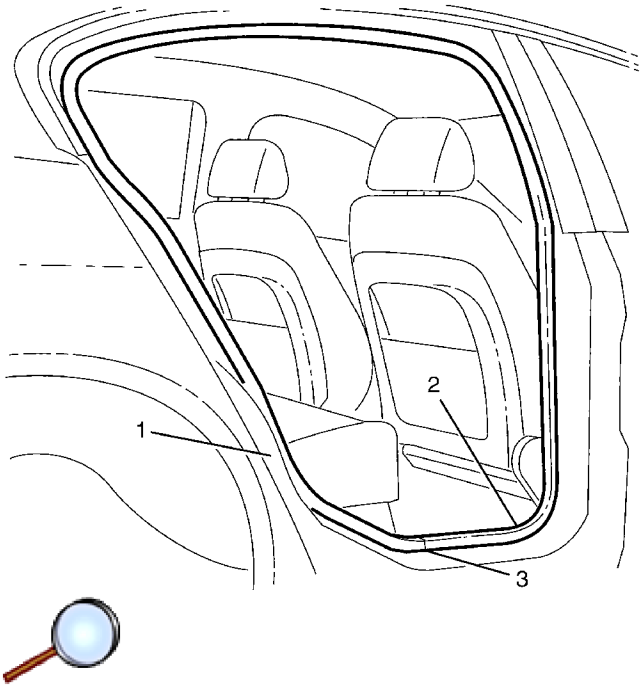
Removal Procedure



1. Open the relevant rear door of the vehicle.
2. Remove the rear side door sill plate. Refer to Rear Side Door Sill Plate Replacement .
3. Starting from the centre sill point (2) carefully remove the rear door weatherstrip (3) from the body panel door opening (1).

Installation Procedure

© 2010 General Motors Corporation. All rights reserved.

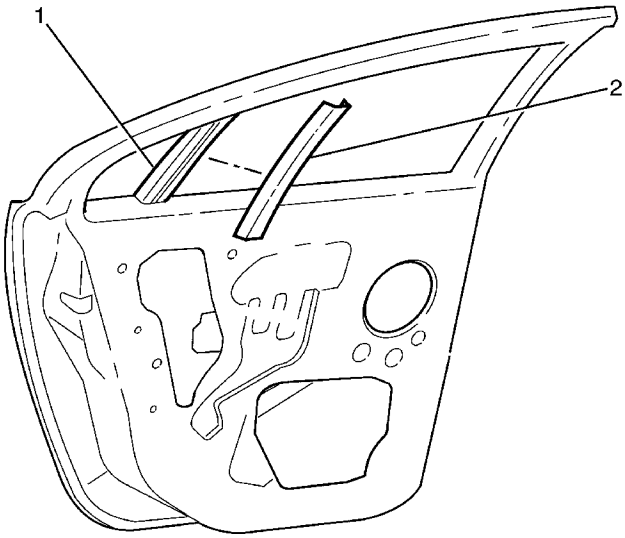


1. Install the rear side door sill plate. Refer to Rear Side Door Sill Plate Replacement .
2. Starting from the centre sill point (2) carefully install the rear door weatherstrip (3) onto the body panel seam in the door opening (1).
3. Close the relevant rear door of the vehicle.

Rear Side Door Window Frame Rear Applique Replacement

Removal Procedure

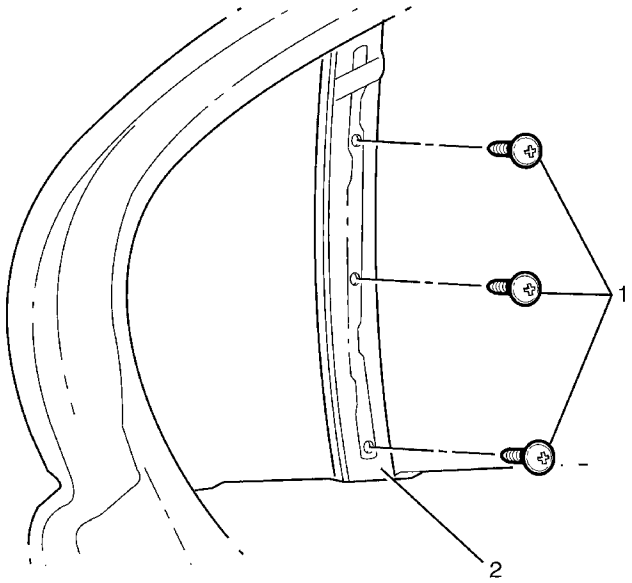
1. Lower the window to the full down position.
2. Remove the door trim panel. Refer to Rear Side Door Trim Panel Replacement.
3. Remove the window inner belt sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
4. Remove the window outer belt sealing strip. Refer to Rear Side Door Window Outer Sealing Strip Replacement.
5. Remove the window inner weatherstrip. Refer to Rear Side Door Window Inner Weatherstrip Replacement.
6. Remove the rear section of the window inner sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.



Note: Pull the rear window division channel trim to release retaining clips.

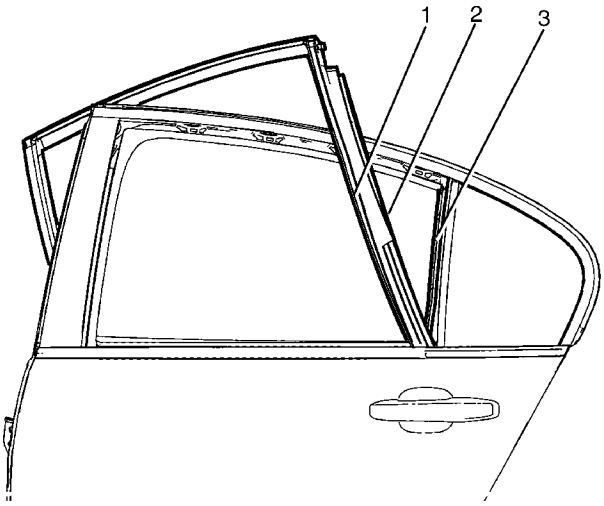
7. Remove the rear window division channel trim panel (1) from the door (2).

© 2010 General Motors Corporation. All rights reserved.



8. Remove the rear window division channel to door retaining screws (1).

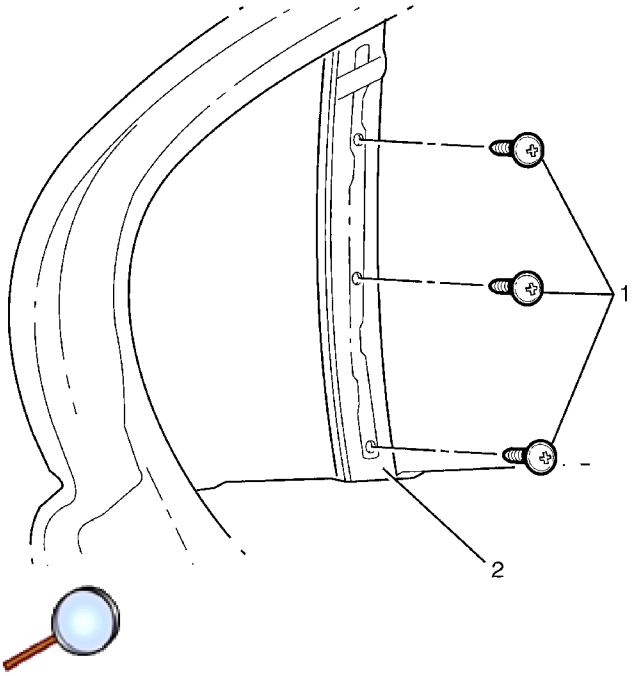
Installation Procedure



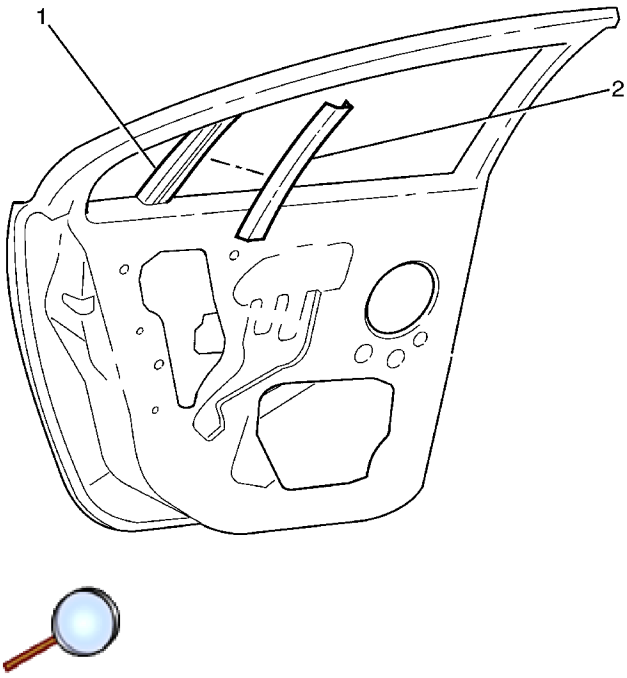
Note: Install the window/division channel (2) and inner sealing strip (1) as an assembly.

1. Install the window/division channel (2) and inner sealing strip (1) to the door (3).

Caution: Refer to Fastener Caution in the Preface section.



2. Install the rear window division channel to door retaining screws (1) and tighten to **3 N·m (27 lb in)**.



Note: Push the rear window division channel trim panel (1) to attach the retaining clips.

3. Install the rear window division channel trim panel (1) to the door (2).
4. Install the rear section of the window inner sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
5. Install the window inner weatherstrip. Refer to Rear Side Door Window Inner Weatherstrip Replacement.
6. Install the window outer belt sealing strip. Refer to Rear Side Door Window Outer Sealing Strip Replacement.

7. Install the window inner belt sealing strip. Refer to Rear Side Door Window Inner Sealing Strip Replacement.
8. Install the rear door trim panel. Refer to Rear Side Door Trim Panel Replacement.